

RESEARCHES,

PHILOSOPHICAL AND ANTIQUARIAN,

CONCERNING THE

ABORIGINAL HISTORY OF AMERICA.

BY J. H. McCULLOH, JR., M. D.

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District of Maryland, to wit:

BE IT REMEMBERED, That on the thirty-first day of October, in the fifty-fourth year of the independence of the United States of America, James H. McCulloh, Jr., M. D. of the said District, has deposited in this office the title of a book, the right whereof he claims as author, in the words following, to wit:

"Researches, Philosophical and Antiquarian, concerning the Aboriginal history of America. By J. H. McCulloh, Jr., M. D."

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TO THE

REVEREND GEORGE STANLEY FABER, B. D.

Rector of Long-Newton, (England.)

SIR:

Whatever may have been the use of a dedication in former times, it has now become of little importance, except as it enables an author to bestow his greatest compliment upon an esteemed friend, or some distinguished and honourable personage. In the exercise of my privilege in this particular, I feel gratified to have the opportunity to render homage to your name, as the author of several works upon subjects connected with the early history of man, and which you have so admirably investigated.

In my labours among the ancient monuments of the human race, I entered the interesting field of research by a route different from that by which you had made such great advances. It was therefore with the highest satisfaction that I have from time to time found myself in a path on which your steps had been impressed, and which often while I hesi-

tated amid perplexed routes, shewed the proper course I should pursue.

This expression of my respectful esteem, is, therefore, not only elicited from the sympathy of congenial studies, but from a sense of obligation for the benefits I have derived from your literary labours.

That you may long enjoy reputation and every happiness, is the earnest wish of him, who with all respect, thus introduces himself to your notice, and desires to be numbered with your well-wishers and friends.

I remain, Sir,

Your obedient humble servant,

J. H. McCULLOH, M. D.

BALTIMORE, *October 31, 1829.*

PREFACE.

As the author of the following pages is conscious that this essay falls short of being complete in its exhibition of the subject he has undertaken to investigate, he feels unwilling that the deficiencies or imperfections of the work should be attributed to any want of exertion on his part. It is therefore hoped that he may be permitted, without the appearance of egotism, to say a few words upon the nature of his labour in the composition of the present volume.

Before the author had completed his studies in the profession for which he was originally intended, he had employed himself with an attempt to understand the manner by which America had been supplied with men and animals. At that time, though his views hardly extended beyond explaining the mere physical difficulties that belong to the investigation, they were deemed sufficiently interesting by the late Dr. Rush of Philadelphia, and some other friends, to be laid before the public. That essay, which a few persons may have read, has been almost entirely forgotten. Very soon after its publication, the author received a subordinate appointment in the Custom House, where he has been employed ever since.

The necessary attention required to comprehend the duties of his new employment, as well as the laborious execution of its details, for many years entirely diverted him from any philosophical pursuit; but about seven years since, he began to devote the partial leisure of the day, once more, to an investigation of the ancient history of America, which, among a variety of cares, interruptions and employments, has been gradually brought into the system now presented to the reader.

His first object, as in the former essay, was to explain the origin of the men and animals of America, so far as that question is involved with the apparent physical impediments that have so long kept the subject in total obscurity. But as it was soon perceived that the history of America was but a part of the general history of man and nature, it became absolutely necessary, that every part of this vast subject should be examined and compared with whatever was interesting in the physical and moral history of this continent. The author, therefore, entirely changed his original plan, and commenced the study of the general subject, with the hope of being able by successive researches, to place the history of aboriginal America in its true bearing with that of the eastern continent. It was naturally concluded, that with a correct exhibition of the subject, the origin of both men and animals would be almost conclusively ascertained.

The difficulties with which the author has had to contend in procuring suitable books, can hardly be appreciated but by those who have attempted a similar investigation in the United States. The public

library of Baltimore, although an excellent collection of books for general readers, was very deficient in those useful to his research; he was therefore obliged, as far as his own means allowed, to procure them from England and France, when an opportunity occurred to make the purchase; for as the earlier writers on America have been long out of print, it is but seldom they can be obtained. Indeed it has been impossible to procure the Spanish writers in their own language, and this will explain the reason why they are sometimes quoted according to a French translation.

A great number of other books on ancient history, geography, mythology, &c. which he desired to examine, have been also unattainable to any means he could exert. In consequence, much quotation at second hand has taken place, and to his regret often in a partial and defective manner, according to the purposes of the writers who quoted from original sources. He has been scrupulously exact in citing authorities in such instances, lest there should be other matters not furnished in the extract, which might render him liable to the imputation of garbling quotations to suit his own views.

But in admitting the deficiency of his materials, in several respects important to a full view of the subject of his present investigation, the author hopes, nevertheless, that he shall not be considered presumptuous in publishing the following work, and it is chiefly to justify this step, that these prefatory remarks have been made. Though he has not read all that has been written directly upon the Indians of America, or upon other subjects connected with the research, yet these different matters have been so far investi-

gated, that the author believes himself possessed of all the important facts necessary to form a good general opinion upon the whole subject. He cannot presume, that the relations of those writers unexamined by him out of a collection of others upon the very same subject, will be found to contain matters invalidating the statements of those consulted, and whose writings agreeing together in a general view, leave no room to suspect a discrepancy with those which he has not seen.

He ventures then to illustrate the position he has assumed, by that of a mathematician who commences to examine an unknown and rugged country, where many prominent objects strike the eye from a distance. Like him, the author has measured *a base line*, and ascertained the angular bearings of the more interesting points. But though the leading features have been thus ascertained, a series of smaller triangles must yet be established before the survey can be considered complete.

The author's literary obligations to individuals, though few in number, are nevertheless too great to be overlooked. To the Honourable Mr. Du Ponceau of Philadelphia, he owes thanks for friendly notice and an instructive correspondence on the Indian languages. To Professor Raffinesque, also of Philadelphia, he is indebted for an acquaintance with some valuable books and communications of great interest. The literary generosity of this gentleman must be appreciated by the fact, that he has at this very time, nearly ready for the press, an extensive work upon the aboriginal history of America.

INTRODUCTION.

THOUGH it is now above three hundred years since philosophers began to speculate upon the condition and history of aboriginal America, we may still without any presumption, state that the subject remains involved nearly in all the obscurity that originally pertained to the investigation.

So different are the men and animals of America, and so insulated is their position when contrasted with all other parts of the globe, that it has hitherto seemed impossible, either to explain the anomalies that exist, or to ascertain any material facts that connect the history of the two continents together. That this statement does no injustice to the labours of preceding writers on the origin of the Indians of America, is very evident; for the editors of Encyclopedias and such other works, who have taken a view of the whole range of theory and dissertation as exhibited in the researches of original writers, universally acknowledge their inability to come to any positive conclusion.

When we consider how much has been written upon this subject, it might almost be supposed, that the original history of America is involved in such circumstances of obscurity and perplexity, as to leave little room to anticipate a solution of those difficulties that have hitherto opposed insuperable obstacles to philosophical scrutiny. Yet, if we advert to the great ignorance that has prevailed concerning the history of aboriginal America, it ought to occasion no surprise that mere theoretic writers on the origin of the American Indians, have failed to solve a difficult problem which they cannot be said to have fairly comprehended themselves.

As we cannot perceive any advantage to the reader in the introduction of exploded or insufficient theories, we forbear to enumerate them; they do not impart any correct information concerning the aborigines of America, and they have entirely failed to shew either their origin, or the manner by which they reached this continent.

But notwithstanding the failure of theoretic writers upon this subject, we have not been discouraged to attempt the investigation upon philosophical principles. It certainly must be within the influence of some solution, whether it be to prove a connexion with other nations or people of the eastern continent, or whether it be that America stands alone and unconnected with the history of all other parts of the earth.

It is to discover the truth alone that we have undertaken this research: and the course to be pursued, seems naturally that we first ascertain, what was the condition of America prior to the discovery of Columbus. After having correct views upon this subject, we can then examine the difficulties, whether moral or physical, that are involved in the origin or in the location of man and the animals. By such methods of investigation we may obtain results, which are capable of being generalized into conclusions both consistent and satisfactory.

According to such views the following pages have been written, and we shall now commence our research with the subject naturally requiring our first consideration; namely, the physical characters of the men of America.

RESEARCHES,
PHILOSOPHICAL AND ANTIQUARIAN,
ON
AMERICA.

CHAPTER I.

ON THE COMPLEXION AND PHYSICAL APPEARANCE OF THE ABORIGINAL NATIONS OF AMERICA.

WE propose in this chapter to lay before the reader, some account of the physical characters of the Aborigines of America, such as they appeared to the first discoverers of the continent; not only in their really natural conformation, but also in those peculiarities of appearance, which, from perverted ideas of beauty, they either inflicted on their bodies, or forced them to assume, while the system was in a growing state, and susceptible of such vicious impressions.

Whatever may be peculiar in the appearance of the American Indians, we cannot refer it to any osteological difference between them, and any other variety of the human family, neither as respects the formation of the cranium, nor physiognomical construction of the countenance; and it is a matter of surprise that physiological naturalists, notwithstanding the avowed uncertainty of their osteological classification, should continue to make use of so imperfect a system. The numerous anomalies noted by them in the form of the skull, alone is sufficient to set their classification aside; for they distinctly admit, that all their varieties of national formation are found in each of the different races they enumerate, and to such an extent, that they can only say at last, in justification of their theoretic views, that these variations do not occur so often, as to destroy the general characteristic of the particular conformation. But

their numerous exceptions make the system so vague and undefined, that we are constrained to abandon it, as a system of natural classification.

It must be acknowledged, nevertheless, that there is a certain physiognomic character of feature, that enables us, at first sight, to distinguish other nations from ourselves, and often from other foreigners, and few it is presumed who have not made this observation, without even thinking of scientific classification. But after some attention to this matter, we rather think that the method by which we recognize foreigners, is not so much from any difference in features, as from the general air and carriage of the body, the dress, and moral expression of the countenance. Thus it is, a well bred man can be discovered even in the most insignificant action of common life. The habitual politeness of the French gentleman, shews itself remarkably among a society of Englishmen, where they are not polished by service in the army, or attendance at court; and we would recognize the sober dignified Spaniard from a Frenchman, by the observation of a few moments. The Hollander, or German, may be grave and serious, but they want the manner and dignified courtesy which belong to the Castillian. A moderate acquaintance with different nations, will soon teach us their characteristic air and manner, when free and unrestrained in their intercourse. But I very much doubt, if individuals of these different nations were seated together, without speaking or moving, whether the most practised eye could distinguish in them, any thing peculiar or different from ourselves.

In the physiognomic engravings of different nations, given in physiological works, which seem to strike the eye with the appearance of great differences, it is really the head dress and clothing, that enables us to recognize the nations whom they are intended to represent. Thus, the turbaned head shews the Turk; the head adorned with feathers, an American, &c. But if the *coiffure* be changed or taken away from each, though there may be different moral expressions of countenance, none would perceive any national peculiarity. This circumstance continually deceives the traveller among foreign nations, who happens to be unaware of the effect of costume.

The peculiar expression of countenance said to belong to the American race, as far as we have been able to ascertain it, is referrible to those moral causes, which operate every where in producing physiognomic expression. Where the

mind is cultivated, or where intellect and the passions have scope, where courtesy, humanity, or enthusiasm prevails, the varied emotions of the soul occasion a mobility of feature, which continually reflects more or less of what is passing in the inmost recesses of the heart; and this circumstance gives the intellectual physiognomy so apparent in civilized nations. But where the mind is hardly ever exercised, except in the means of circumventing inferior animals, and where nothing intellectual is perhaps ever excited, the features assume a fixed, grave, and even stern expression, according to the peculiar temper and feeling of the individual, who perhaps expresses no passions of the mind, except it may be grave complacency when animal wants are satisfied, or rage, when offended. Such we consider the general character of the Indian countenance, not differing from that of any other people who may be brought up under similar circumstances. The African, equally ignorant and barbarous, is generally more cheerful, because he is more of an agriculturist. His wants are more easily supplied, and the satisfaction he feels he has more opportunity of displaying. But *cæteris paribus*, I think it will be found as stated above, that barbarity of manners induces the same expression of countenance.

Systematic writers have also considered the native tribes of America, as a fifth class of the human species, under the distinct term of the "Copper Coloured Race." To this term we have much to object, not only as respects the Americans, but other nations, from whom it seems to us, they have been improperly separated by this theoretic distinction. In order to have a correct understanding of this subject, we should be told what is the copper colour, for that metal has several very different hues. Any person who inspects a large quantity of copper coin before it has been much handled, may perceive eight or ten shades of colour, not only rising to an ashen yellow, but also deepening to a darkish blue. That some of these varied tints, may to a certain degree resemble the general complexion of the American Indians, I am not disposed to deny altogether; but if the colour of copper, as usually seen in sheets or other manufactures, is assumed as the tint, it is at variance with all the observations we have been able to make. The word applied to the human complexion is ill chosen, for the mind always associates with it the idea of metallic lustre, which the skin is incapable of assuming. Even cinnamon colour is objectionable, unless a more than commonly pale speci-

men of that article is furnished. This I assert from some personal observation among the Chippeways, Pottawottomes, &c.; and that other American Indians are not characteristically of this copper colour, may be reasonably inferred, not only from the descriptions given by more recent travellers, but also from finding the same term, copper colour, applied to natives of the South sea, and certain of the Asiatic and African tribes.

The term, I believe, was first employed, to describe the complexion of the American Indians; and it is presumable was given by superficial observers, who were deceived by the faded marks of red paint, so universally used among them, and which is hardly ever so much worn off, as not to leave a reddish tinge on their brown faces. But the hands, legs, &c. do not exhibit this complexion. However the term has now become so current, that all navigators and travellers use it specifically, and by this means we shall be enabled to establish our point, perhaps not directly, that the Americans are not copper coloured, but we shall be able to shew that so many other nations are described of the same complexion, that it must cease to be considered the distinction of the American race. By this circumstance we shall be able to unite the American Indians, again to those, from whom they have been inconsiderately separated by this fanciful distinction. To this end we adduce the following authorities, which will shew that the term "copper coloured" has been applied very widely to other nations than the Americans.

Hainan Islanders on the coast of China, "*copper colour.*" (Grosier in Winterbotham's Hist. of China, i. 127.)

Inhabitants of Disappointment Islands, "*deep copper colour.*" (Hawksworth's Voy. i. 114.)

Malays of Timor, "*deep copper colour.*" (Cartaret in Hawksworth, i. 445. Peron and Le Suer, i. 144.)

Nicobar Islanders, "*copper colour.*" (Asiat. Research. iii. 151.)

Nassau or Pogy Islanders, "of a light brown, or *copper colour*, like the Malays." (Asiat. Research. vi. 83.)

Magindinao Mahometans, "*deep copper colour.*" (Mears' Voyage, i. 65.)

Guam natives, "*copper coloured like other Indians.*" (Dampier, i. 297.)

Bashee Islanders, "*dark copper colour.*" (Dampier, i. 427.)

Free Wills Islands, natives, "*Indian copper colour.*" (Cartaret in Hawksworth, i. 445.)

Lagoon Islands, natives, "*copper colour.*" (Cartaret in Hawksworth, ii. 80.)

Friendly Islands, natives, "*copper colour.*" (Cook's Voyage to South Pole, i. 217.)

Toubouai, "*stout copper coloured people.*" (Cook's Voyage to North Pole, ii. 6.)

Gambier's Islands, natives, "*light copper colour.*" (Mission. Voyage, 115, 117.)

Duff's Group, "*copper colour.*" Mission. Voyage, 291.)

Tucker's Island, one of the Caroline Islands, "*dark copper.*" (Mission. Voyage, 291.)

Lord Howe's Group, "*dark copper.*" (Hunter's Voyage, 222.)

Duke of York's Islands, "*light copper.*" (Hunter's Voyage, 233.)

Tench's Group, "*light copper colour.*" (Lieut. King in Hunter, 42.)

New Hollanders, some black, others "*copper or Malay colour.*" (Collin's New South Wales, 359.)

Washington Islands, "*copper colour, and some fairer.*" Com. Porter's Journal, ii. 14, 62.

Laplanders, "*copper coloured.*" (Clark's Travels in Scandinavia, ix. 486, 506, 508, 540.)

Recent discoveries have made us acquainted with nations distinguished by the term *copper coloured*, extending into central Africa as far at least as Lake Tchad. These people of various tribes are distinguished by Denham and Clapperton, as being copper coloured, clear copper colour, deep copper, dingy copper, &c. See Denham's Journal, 30, 56, 88, 131, 134, 136, 162, and Clapperton 58, &c.

Malte Brun, Geog. book 69, designates the Sognies bordering on the Zaire, as "*copper coloured.*"

Thus has this vague term been extended by navigators and travellers over a great part of the earth; and if it be considered at all accurate in one case, it must be so in others; and its universality will effectually prevent our considering the American Indians, as being thus distinguished from other brown men. The preceding quotations from Dampier, Byron, Mears, and Commodore Porter, who were accustomed to the sight of American Indians, shew the evident resemblance in complexion, between them and the natives of the Indian and Pacific oceans, be the colour what it may; and their general resemblance to brown men, of other parts of the world, may be directly inferred, from Volney's and Humboldt's observations on this particular subject. The for-

mer remarks, (*View of the U. States*, 364,) "At Vincennes, (on the Wabash) and at Detroit, I met with Indians that reminded me of the Bedouins and Egyptian Fellahs; in the hue of their skin, quality of hair, and in many other circumstances they were alike." Humboldt says, (*Polit. Essay*, i. 115,) "the analogy between the Mongol and American races, is particularly evident in the colour of the skin and hair, in the defective beard, high cheek bones, and in the direction of the eyes. We cannot refuse to admit, that the human species does not contain races resembling one another more than the Malays, Mongols, Mantcheaux, and Americans."*

The few Malays, or Maccassars, that I have seen, bear so general a resemblance to our northern Indians, that it is not easy to say in what respects they differ. At most, it cannot be more than in a pallor of complexion, which naturally ensues from a residence in tropical climates, and which can be easily appreciated by any one, who has an opportunity of contrasting the complexion of Europeans or Anglo Americans when thus exposed, with those of the same race who inhabit dry and healthy situations of the temperate zone. Mr. Marsden appears to have suggested the reason of any difference of complexion between the Malays and the American Indians, when he observes, that the Rejangs who constitute a considerable portion of the natives of Sumatra, "have a complexion properly yellow, wanting that red tinge, that constitutes a tawny or copper colour." (*Hist. Sumatra*, 40.) I infer from this, that were the Rejangs to live in a more cool and temperate region, they would acquire this reddish tinge, or, in fact, healthy complexion of which it is indicative, and which would then constitute them a copper coloured people in the ordinary use of this word.

We consider, therefore, that the colour of the American Indians in general is a brown; differing in intensity with various tribes, according to various localities; but that it is almost impossible to say what that brown colour principally resembles. The cinnamon, is in our apprehension, the nearest approach to it; though still too inaccurate for gene-

* The Baron, it is true, says, "these features of resemblance do not constitute an identity of race." We are not concerned with any theory, that one may see proper to establish upon these facts; but it is strikingly apparent that the very slight if not fanciful shades of difference, between the American and Mongol races, which the Baron goes on to enumerate, do not separate the two in any equal degree, with what the analogies which he has enumerated tend to unite them; and which are those of *skin, hair, eyes, and osteological character of face.*

ral comparison. Under these circumstances, it seems most correct, simply to use the general term, brown men; who will thus constitute an intermediate class, between the white and negro races. These three complexions being distinctly admitted, all other modifications of complexion can be accounted for by their intermixtures, where the variation of colour is too great to be referred to climate, local situation, and state of civilization; which it may be presumed do exercise a partial influence on the skin.

There is undoubtedly a great similarity in the appearance of the Indians of America to each other, except in a few remarkable instances to be noticed in their proper place: yet there are also various shades of difference among them, shewing the impossibility of reducing them all under one general class of complexion. Though their colour is commonly assumed to be that of copper, we find travellers constantly remarking the variations of hue among different tribes, as for instance:

The Indians near the sources of Peace river, are of a *swarthy yellow* complexion. (*Mackenzie's Voyage*, 195.)

The Cherokees are of a *lighter colour* than adjacent Indians. (*Barton's New Views*, p. xlv.)

The Mandans and Gros-ventres have a *light complexion, and hair inclining to chestnut*. (*Topog. Description of Ohio*, 152.)

"The complexion of the Quapaws, like that of the Choctaws and Creeks, is dark, and destitute of any thing like the cupreous tinge." (*Nutall's Travels*, 83.)

The Mexican complexion, according to Clavigero, is *olive*. (*History of Mexico*, i. 104.)

Herrera v. 11, says, "the women of the Chiachiapoyos of Peru, were so much whiter and more graceful than other Indians, that they were sought after by the Incas."

Baron Humboldt remarks, "if the uniform tint of the skin be more coppery and redder toward the north, it is, on the contrary, among the Chaymas, of a deep brown, inclining to tawny. The denomination of copper coloured men, (*rouges cuivrés*) could never have originated in equinoctial America to designate the natives." (*Personal Narrative*, iii. 223.)

Gumilla, (*Description of the Orinoco*, i. 107,) says, "the colour of the Indians on the borders of the Orinoco, is so diversified, that he could say nothing of it under one general head."

The Guaycurus of Brazil, "are of a darker tint than copper." (*Southey's Hist. of Brazil*, iii. 671.)

"The Charruas are more black than white, without any mixture of red." (*Azara Voyages*, ii. 8.)

"The Guayanas, (a different people from the Guaranis) of Brazil and Paraguay, differ from all the Indians of those nations, by the lightness of their colour, and some of them have blue eyes." (*Azara Voyages*, ii. 76.)

Hitherto, we have confined our discourse to that portion of the American Indians, who may be strictly termed brown men; and we presume that in a general manner, we have established the fact, that there is a great variety of shades of complexion existing among them, the reason of which we shall not attempt to explain, even were the solution less difficult than we apprehend to be the case. We shall now proceed to describe other nations of America, of a very different complexion, which being a matter not generally known, we feel a necessity of establishing by many proofs; and therefore may seem to overcharge our page with more extracts and quotations, than is agreeable to those who prefer the smoothness of an uninterrupted discourse. But the points we have to establish, are derived from the narratives of various travellers, who do not commonly express the same ideas with equal precision; and sometimes indeed differ with each other. To ascertain the fact, therefore, it is necessary, that their various relations should be laid before us, that we may exercise a sound discrimination in forming our opinion.

It has been long known that the Esquimaux, were in comparison with other Americans, of a white complexion; and this circumstance so far misled Dr. Robertson, that he conjectured they were the descendants of the Norwegians, who discovered Greenland in the year A. D. 982, and made some insignificant settlements there. It would be unnecessary to disprove this opinion, for the Norwegians themselves describe the Esquimaux already there before them, under the name of *Skrœlingues** or dwarfish people; but we will attempt to shew what the complexion of the Esquimaux is, from the accounts of different travellers.

The Greenlanders are described by Egede, of a dark tawny complexion, though some are pretty fair.

Ellis (*page* 139,) says, their colour inclines to the European white, rather than to the copper colour of the Americans.

Dobbs (*Account of Hudson's Bay*, 50,) states, they have a white complexion, not copper coloured.

*Pennant's *Arct. Zool.* Introduction i. 64. See also *Edinburgh Review*, for June, 1818, 37.

Kalm (*Travels*, ii. 263,) relates, the Esquimaux are almost as white as Europeans.

Capt. Lyon, (*Journal*, 224,) observes, the Esquimaux complexion previously washed, "is not darker than that of a Portuguese; and such parts of the body as are constantly covered, do not fall short in fairness, to the generality of the natives of the Mediterranean."

Capt. Parry (*3d Voyage*, 493,) says, "the complexion of young persons among them is clear and transparent, scarcely a shade darker than a deep brunette."

From the above accounts, the character of the Esquimaux as a white nation seems to be clearly established; and we proceed to shew that certain other people of America, are even more distinctly entitled to that appellation. These are chiefly the natives of Prince William and Nootka sounds, who have been visited by several navigators, whose descriptions we shall now transcribe. Capt. Dixon, (*Voyage*, 171,) who was at Port Mulgrave has given the most explicit statement of this fact. He observes, "the natives are particularly fond of painting their faces with a variety of colours, so that it is no easy matter to discover their real complexion; however, we prevailed on a woman, by persuasion and a trifling present to wash her face and hands, and the alteration it made in her appearance absolutely surprised us; her countenance had all the cheerful glow of an English milk maid, and the healthy red which flushed her cheek, was even beautifully contrasted by the whiteness of her neck; her forehead was so remarkably clear, that the translucent veins were seen meandering even in their minutest branches; in short, she was what would be reckoned handsome in England." The English translator of La Peyrouse's *Voyage*, seems to think this account of Dixon's, not confirmed by the observations of that navigator, but there does not appear to me any reason for such an opinion. This last voyager speaks of these Indians as they appeared to him, covered with dirt, paint, and fish oil; and Capt. Dixon describes the natural complexion when cleansed and washed. The French editor, however, confirms the account of the latter by the relation of Don Maurelle, who says, "several of the women among them, if better dressed, might dispute charms with the most beautiful Spanish women."

La Peyrouse himself, (*Voyage*, iii. 144,) though he says the colour of the natives at Port des Francais is very brown, owing to continual exposure to the air, yet adds, "but their children at the time of birth are as white as ours."

Now, as the opinion that Indians and negroes are born white, and change colour afterwards has been deservedly exploded, we may rest satisfied that those who are born white, will continue of that complexion.

The relation of Marchand, (*Voyage*, i. 145,) confirms whatever may be wanting in that of La Peyrouse; for it is there said, "several of these Indians scarcely differ from Europeans of the labouring class when their skin is only a little tanned. Of their hair, some is flaxen, some auburn, or black, long and curling." La Peyrouse, (iii. 204,) says "chestnut coloured hair is by no means unfrequent among them."

Capt. Cook observes, "we could never positively determine their colour; (at Nootka) they being incrustated with paint and dirt, though in particular cases, when these were well rubbed off, the whiteness of the skin appeared almost to equal that of Europeans, though rather of that pale effete cast, which distinguishes those of our southern nations. Their children, whose skins had never been stained with paint, equalled ours in whiteness." (*Cook's Voyage, New Hemisphere*, ii. 303.)

Sebastian Vizcaino says, at Sta. Catalina on the N. W. coast, that "the boys and girls were of a complexion white and red." (*Burney's South Sea Discoveries*, ii. 248.)

Finally; the description given by Mears of the people of Nootka sound, (*Voyage*, ii. 39,) entirely accords with the preceding authorities. "At Nootka, the skin of the natives is white, and we have seen some of the women, when in a state of cleanliness, which is by no means a common sight, and obtained with difficulty, who not only possessed the fair complexion of Europe, but also features, that would have attracted notice for their delicacy and beauty in those parts of the world, where the qualities of the human form are best understood."

The other localities of white nations, are in South America; and are thus noticed by Baron Humboldt, and the Abbé Molina.

"In the forests of Guiana, especially near the sources of the Orinoco, are several tribes of a whitish complexion, the Guiacas, Guajaribs, and Arigues, of whom several robust individuals exhibiting no symptoms of asthenical malady, which characterises Albinos, have the appearance of true Mestizoes.* Yet these tribes have never mingled with Eu-

* A Mestizo, according to this writer, is the son of a white and a native of copper colour: His colour is almost a pure white, and his skin of a peculiar transparency. If a Mestizo marry a white woman, the second generation differs hardly in any thing from the European race. *Humboldt's Polit. Essay*, i. 183.

ropeans, and are surrounded with other tribes of a dark brown hue." (*Humboldt, Polit. Essay*, i. 108.)

There is a tribe of Indians in the province of Baroa in Chili, whose complexions are of a clear white and red, without any intermixture of the copper colour. (*Hist. Chili*, ii. 4.)

Herrera, iv. 90, mentions, that in the Captaincy of Isleos in Brazil, is a certain race of *very white Indians*, of a gigantic stature, who spoke a language not understood, and who came there not long before A. D. 1528. They are described as very cruel and cannibals, and I presume, are the same or a kindred race with the Aymores, who invaded Bahia in 1603. These last are described as being in many instances, both of men and women, of as fair complexion as the Germans. (*Southey's Hist. Brazil*, i. 389.)

Skinner, (*Present State of Peru*, 269,) by accounts received from the Spanish missionaries, says, that the natural complexion of the Conivos, one of the Manoa tribes on the Maranon, might vie with that of the Europeans, were it not for exposure, stings of insects, &c.

Dobrizhoffer, (*Hist. Abipones*, ii. 10,) says, that some of the Indians of Terra del Fuego are more than moderately white.

Albinoes, have at all times been observed among the different races of men. In America, however, they seem to have been assembled together in certain districts, in greater numbers than appears to have been noticed in any other part of the earth. The account given of them by Wafer, (*Descrip. Isthmus of America*, 107,) is a conspicuous instance, and so well known, that it seems unnecessary to repeat his relation. Indeed, we should scarcely have noticed the Albino variety, had we not thought it of some little importance to preserve the memory of a Cherokee tradition, which seems to declare, that anciently there was some remarkable instances of this variety of men in Georgia or Louisiana, sufficiently numerous to be remembered in Indian tradition. "The Cherokees say, that when they first arrived in the country they now inhabit, they found it possessed by certain moon-eyed people, who could not see in the day." (*Barton's New Views*, xliv.) This is apparently though obscurely substantiated by Alvaro Nunez, in his relation of the expedition of Narvaez. (*Purchas Pilg.* iv. 1520.) "Some of the Indians brought many people before us, the greater part whereof were squint-eyed, and others of the same people are blind, whereat we greatly

marvelled; they are well set and of good behaviour, and whiter than all the rest that we had seen until then."

Though America possesses some dark brown men, approaching to black, yet it has been almost universally believed that there were no aboriginal blacks or negroes found on this continent. But from considering the peculiar circumstances under which a black race was found in North America, I hold it more than probable that the common opinion is erroneous. Torquemada says, the Californians shewed no manner of surprize at the sight of some negroes that accompanied Viscanio on a voyage to this coast, A. D. 1602. As I have never seen Torquemada's *Monarquia Indiana*, I can only quote from Venegas, (*California*, ii. 239,) who says from Torquemada, that when a negro was ordered to distribute some biscuit to the Californians at the bay of St. Barnabas, "the natives seemed greatly pleased at the sight of the negro, and signified to him, that they lived in friendship and correspondence with a people of his colour, and that not far from thence was a negro village."

Torquemada undertakes to explain this remarkable circumstance, by supposing that negroes had been left there by some ship from the Philippine Islands. But as he does not quote the time when such an event had occurred, we presume it was a mere conjecture of his own, to explain an anomaly of which he had been previously ignorant; and at first we were disposed to think the supposition plausible: but as it was found, on extending our researches, that the negro character of the Indians on this coast, has been distinctly remarked by various navigators, even of the present day, we deem it impossible that any few individuals, who were probably without women with them when left on this coast, could have been able to communicate their peculiar complexion and features to entire nations, even after a period of above two hundred years.* The subject however is

* One of the very first voyages to California was made by Cortez in 1535, who was accompanied by four hundred Spaniards, and three hundred negro slaves, he coasted both sides of the gulf of California, and returned safely to Acapulco. (*Humboldt's Pol. Essay*, ii. 220.) In this expedition, is the earliest account we have of negroes having been sent to that part of America, but there is no reason to think any of them were left on shore, as they were valuable property.

About seventy years after this voyage of Cortez, the voyage of Viscanio described by Torquemada took place; apparently much too short a time for negro villages to have been built, with whose inhabitants the natives had formed leagues of friendship; even if it were proved, which it has not been, that such persons had been wrecked or left ashore about these periods of time.

still in obscurity, and belongs to that *terra incognita* of America, laying between the rivers Columbia and Gila. The authorities I have been able to examine respecting the present negro appearance of the Indians in that region, are as follow:

The colour of the Indians of the Californian missions, seen by La Peyrouse, (*Voyage*, ii. 197, 212,) "very nearly approaches that of the negroes whose hair is not woolly; and in another place, the "colour of these Indians which is that of negroes."

Langsdorf, who visited St. Francisco on the coast of California, confirms the observations of La Peyrouse; for he says, (*Voyage*, 440,) the Indians there, "are of a very dark complexion, approaching to black; they have large projecting lips, and broad flat negro like noses; indeed many of their features, as well as their physiognomy, and almost their colour, bear a strong resemblance to the negroes: their hair, however, is long and strait."

From the plates in Choris Voyages, of which I had but a slight examination, they appear to resemble very nearly the blacks of Hindostan, of whom a few Mahratas only, have fallen under my personal observation. But it is well known that many of the Hindu race, are only distinguished by straightness of hair from the Africans, for they are not less black. This circumstance has been noticed by Strabo, as the distinction between the two races. As we cannot admit for a moment, that these American blacks were ever driven by stress of weather across the Pacific ocean to California; unless it be proved they are the descendants of negroes left by the Spaniards, it will follow of necessity, that they have been settled in America from the earliest ages.

In another part of America, if reliance can be placed upon the correctness of the relation, a race of blacks were seen at so early a period of our history, that it seems impossible to avoid the conclusion that they were aboriginal. Peter Martyr, (*3d Decade*, page 97,) in describing the journey of Balboa across the Isthmus of Darien, A. D. 1511, gives the following history: "There is a region not above two days' journey from Quarequa, in which they found only blackamoors; and those exceeding fierce and cruel." The circumstance of finding them there, he attempted to explain, by the conjecture that they were Ethiopians, who had crossed the Atlantic to rob the country, and that after having been shipwrecked, they had been compelled by the natives to take refuge in the mountains. But

all this is pure guess work, which we shall not attempt to disprove, for it is not more plausible than the supposition that they were aboriginal. It is only interesting to us to inquire, whether the fact really be as represented by the historian of Balboa, or whether he may not have been deceived by some external filth or paint, whereby these people were remarkable from other Indians. On this subject I have nothing to produce, as no other account of this particular part of America, that I know of, mentions the circumstance, which perhaps has arisen from the belief, that these blacks were descendants of the runaway negroes, which the infamous slave trade, had brought to tropical America at a very early period.

If I am not much mistaken, however, we shall be able to shew, that the relation of Peter Martyr, concerning the blackamoors, as he calls them, seen by Balboa, was substantially correct: for we learn from Stevenson, (*Travels in South America*, ii. 387,) the following singular facts, which we shall quote at length. "The natives of Esmeraldas, Rio Verde, and Atacames," (Republic of Columbia,) "are all *Zambos*, apparently a mixture of negroes and Indians; indeed the oral tradition of their origin is, that a ship having negroes on board arrived on the coast; and that having landed, they murdered a great number of the male Indians, kept their widows and daughters and laid the foundation of the present race. If this were the case, and it is not very improbable, the whole of the surrounding country being peopled with Indians, it produces a striking instance of the facility with which an apparently different tribe of human beings is produced; *for the present Esmeraldenos are very different in their features, hair, colour, and shape, to the Chino, or offspring of a negro or Indian*; these are commonly short and lusty, of a very deep copper colour, thick hair, neither lank nor curled, small eyes, sharpish nose, and well shaped mouth; whereas the Esmeraldenos are tall and rather slender, of a lightish black colour, different from that called copper colour; have soft curly hair, large eyes, nose rather flat, and thick lips, possessing more of the Negro than of the Indian, &c. The language of the Esmeraldenos is also entirely different from the Quichua, which is the general language of the Indians; it is rather nasal, and appears very scanty of words, &c."

It is very singular, that so intelligent a writer as Stevenson, could listen to the story, that the black natives of Atacames, &c. could have descended from a ship load of ne-

groes, who had in some immemorial time arrived on this coast: for every word of comment or explanation that he has made, is in direct opposition to such an hypothesis; and if the offspring of a Negro and Indian, be entirely different from the natives of the Atacames, Esmeraldos, &c. by what imaginable rule can we refer the origin of these people to such progenitors! The whole legend is ridiculous, and has been no doubt a Spanish or Indian suggestion to explain the singularity of the fact, concerning which they had no other method of explication.

I know not whether the population to the northward, partake of this black complexion of the Atacames, &c. but these last are now about four hundred miles from Quarequa, where Balboa is reported to have seen a similar complexion. This distance however is immaterial, the direction or course being the very one, to which an emigration would naturally be made, if such took place to the southward. Or their more northern brethren may have been exterminated in war with other tribes, or may yet be observed in those regions, if some intelligent traveller could visit the country.

Juarros, (*Hist. Guatemala*, 346,) in describing the complexion of the people of that province, which almost terminates in the country visited by Balboa, says expressly, that some of the Indians there are white, others *black*, and others red or copper colour, and seemingly considers them original nations by this enumeration; for he makes no observation on these peculiarities of complexion. I presume, that in this instance he made no mistake from their external appearance, for he was aware, (*page* 194,) that the Indians did paint themselves black, to protect themselves from the stings of musquitoes.*

There is another circumstance connected with the history of blacks in this part of the world, which it may be proper to introduce in this place, be it worth what it may; "the people of Hispaniola informed Columbus, (*Herrera*, i. 374,) that there was to the S. and S. E. a *black people*, who pointed the heads of their javelins with metal, &c." It is not easy to imagine the natives of St. Domingo had any acquaintance with the people of the Isthmus, or even of those of Guatemala, though it is not impossible. If this could be deemed probable, there will be little difficulty in considering the fact well established, that there were blacks in these

* Juarros says, that July 2d, 1594, Philip the Second directed, that a minute detail of all circumstances regarding the native inhabitants, should be transmitted to him, &c. This document probably is yet in the archives of Simancas, and may settle this interesting fact, if access can be gained there.

parts of the continent, who had extended themselves both north and south of the Isthmus of Darien.

The American Indians, compared with Europeans, have but little beard, and it is almost universally their practice to eradicate it, as well as all other hair from their bodies. Some even plucked out their eyebrows and eyelashes, as was pretty commonly the case with the natives of Brazil and Paraguay. (*Gumilla, Hist. Orenoque*, i. 105, 201. *Azara*, ii. 124, 164.) This paucity of beard is not peculiar to the Americans, the Tartar and Malay tribes are equally deficient, as well as the African race. This is now so well understood that it is unnecessary to notice it further.

But if travellers and naturalists, have formerly been willing to consider the American Indians as being generally beardless, they have been highly liberal to the Esquimaux in this particular. Charlevoix (*Travels*, 106,) says, "they have a beard so thick up to their eyes that it is difficult to distinguish any features of their face." Ellis, more moderate, describes them, (*page* 139,) as having beards sometimes long and bushy. Dobbs (*Acct. Hudson's Bay*, 50,) agrees with Charlevoix in saying "they have beards up to their eyes."

Egede, however, does not describe the Greenlanders, who are undoubtedly of the Esquimaux stock, as being distinguished by this peculiarity, and Capts. Ross and Parry do not mention the Esquimaux seen by them, as having other than thin beards, though they permit it to grow. We must therefore consider the statements of Charlevoix and Dobbs to be exaggerations, derived from hasty and inconsiderate observation, in which they were misled by the contrast afforded by the nations around. The real fact appears to be, that the one people permitted the beard to grow, while others in general carefully plucked it out; but that naturally there is little if any difference between them in the quantity. In like manner we must account, most probably, for other instances of bearded people in America, such as the Yabipias Indians near the river Gila, and the nation called Guamos on the Orinoco, mentioned by Gumilla, i. 201. That these nations are only called bearded from contrast, may be further inferred from the instances occasionally remarked throughout America, of individuals, among beardless tribes, being described with large beards, when whim or caprice of some kind or other, had induced them to cherish its growth.

But it is not entirely true, that the American Indians pluck out their beard; for in addition to the above instances, we

must mention that the Miges, a nation of Mexico wear long beards, which Herrera, (*Hist. Amer.* iv. 125,) observes was a rare custom.

La Peyrouse says, (*Voy.* ii. 198,) that some of the Indians of California, had beards large enough* to have been of importance in Turkey, or the vicinity of Moscow.

Throughout both N. and S. America, the natives with few exceptions, pricked black or blue figures into their skins; a custom that has prevailed among almost every rude nation in the world, and in such numerous instances, that it is not worth while to quote authorities.

Very generally in N. America, and also in Peru, and Brazil, the natives cut the outer edge of the ear loose, to which they attached such a variety and weight of ornaments, as sometimes, literally to stretch this partially detached portion down to the shoulder. They also perforated the cartilage of the nose, in which they wore rings, reeds, stones, feathers, &c.

Many nations of the eastern continent disfigured themselves in like manner. The natives of the Fidgi islands, (*Mariner*, 212,) and those of Bali, adjoining Java, (*Crawford's Ind. Archip.* i. 218,) stretched their ears in like manner to an enormous degree.

Many tribes flattened the forehead by artificial compression; they laid the young infant on its back, with the head in a hole made to receive it, and then applied a small bag of sand or other weight, on the frontal bone, until it more or less assumed the desired flatness. Sometimes they accomplished the purpose by binding two flat boards tight on the head. This custom prevails among the nations on the western slope of the Rocky mountains, and was once remarkable among the Choctaws, and also the Caraihs of the West India islands. Some Peruvian and Brazilian tribes, also adopted this preposterous fashion.

The Arrowacks, who inhabited the larger West India islands at the time of the discovery by Columbus, flattened the head downward in the direction of the spine. (*Edward's W. Indies*, i. 74.) They appear to have been alone in this practice, according to our inquiries.

The natives of Asia and of the Indian islands, in certain instances, compressed the forehead like the Caraihs. This was done by the people of Arrakan in the Burman empire,

* It is most probable, that the figures of bearded men observed in various Mexican antiquities, are connected with the history of this people, and the Yabipais, and Californians.

(*Mod. Univ. Hist.* vi. 127,) and several Islanders of the Indian Archipelago. (*Crawford's Ind. Archip.* i. 218.)

The Caraihs bound strong ligatures round the legs of their children, that they might enlarge the calf, and raise the flesh in ridges from the ancles to the top of the thighs. This practice was observed by Columbus on his first voyage, (*Peter Martyr*, 303.) It is also mentioned by Gumilla, (*Hist. de l' Orinoque*, i. 196,) as practiced by that people in his time.

Many of the Brazilian tribes cut holes in their cheeks and noses, in which they inserted coloured stones, pieces of wood, feathers, &c. (*Ulloa*, i. 395—*Azara passim.*)

But the most extraordinary perversion of nature, was practised among those nations who attempted to exhibit either two mouths, or else inserted in the transverse slit that made this second mouth, a piece of wood carved like the bowl of a soup spoon, which projected out with the cavity upwards, as if to catch what might drop down whilst eating. This disgusting ornament was much used especially by women, on the N. W. coast. See Cook, Vancouver, Peyrouse, Dixon, &c.

The same custom prevailed in great measure throughout the Brazilian nations, (*Azara passim.*) It was observed on the sea coast by Cabral, who describes the natives as having the lower lip cut like a second mouth, and wearing a stone in it, or piece of wood; which in some instances hung down like a tongue. (*Azara*, ii. 150. *Southey's Brazil*, i. 224.)

Some Indians near Buenos Ayres, according to Gumilla, (*Hist. de l' Orinoque*, i. 201,) cut the mouth from ear to ear!

Dampier, (*Voyage*, i. 32,) describes the natives of the Pearl islands, (*Margueritte*), wearing a piece of tortoise shell passed through the lower lip by a round hole, and which hung over the chin like a beard. Cortez describes the grandees of Zempoallan with their under lips hanging on their chins, from the weight of ornaments thereto appended. (*Gomara in Purchas*, iii. 119.) The Miztecas used the same disfigurement. (*Herrera*, iv. 260.) And the Mexicans adorned some of their divinities after this fashion. (*Herrera*, iii. 205.) Cabeza de Vaca, observed the Floridian Indians to have holes in the under lip, through which they thrust pieces of reed. (*Herrera*, iv. 33.)

I have met with no instances of any other than Americans thus slitting or boring the lower lip, except the one

mentioned by Major Denham in the relation of his journey to Central Africa. He observes, (*page 42*,) that "the Musgow women wear a silver stud in the lower lip,* which not only causes the loss of the two under front teeth, but drags the lip down on the chin, and gives a frightful and disgusting appearance to the face."

In general the American Indians did not interfere with nature by disfiguring their teeth. The few instances we have observed of such a practice, are as follow:

Herrera, (*Hist. Amer.* iv. 174,) relates, the women of Yucatan, "formerly used to saw their teeth."

Some of the natives of Peru, like the natives of New Holland and the Sandwich islands, knocked out their front teeth, (*Garcilazo Royal Comment.* 354.) Zarate, (*Conq. Peru*, lib. i. chap. 6,) says, some of the Indians near the Island of Puna, extracted all the teeth of the upper jaw! But this certainly must be a mistake, though founded probably in a careless observance of a practice, like the one mentioned by Garcilazo as above quoted.

Our researches on the physical history of the Aborigines of America, have not enabled us to add any thing to the physiological history of man. Though we have admitted that climate and states of civilization might occasion some partial modifications, yet neither as respects their stature, physiognomy, or complexion, have we been able to discover any common principles, by which we can explain the diversities that exist in the human family. The discovery certainly of a white race, and probably of one that is black in America, adjacent to each other, and surrounded by brown men on all sides, becomes irreconcilable with any theory, that supposes these different complexions to be consequent on physical causes. And when we connect these American anomalies, with the existence of brown men in Africa, and black men in the islands of the Indian and Pacific oceans, who yet live under the same solar influence, and with similar uncivilized institutions, we feel more and more reluctant to admit that these diversities have originated from partial causes.† Men divided into white, brown, and black, have

* Diod. Sic. lib. iii. chap. i. mentions women in Ethiopia, who hang a brass ring at their lips.

† I am fully aware of what has been written by many authors on this subject, and am not unwilling to admit, that the diversities of human complexion may have originated from natural causes; but not that these effects have been produced in their present geographical situations, unless in the most partial manner. But it may be necessary to add, that there can be no difficulty in explaining certain differences of complexion, varieties of hair, &c.

existed from the earliest times of history, and they have at least to our knowledge, continued in those relative states, without ever departing from their established characters. The observation of Humboldt it would seem is absolutely correct, who remarks, "that notwithstanding the variety of climates, and elevations inhabited by the different races of men, nature never deviates from the models of which she made selection thousands of years ago." (*Polit. Essay*, i. 109.)

by the admixture of different coloured stocks, which in a manner may be almost infinite, as we know to be the case in the West Indies and our slave holding states. Our observations only apply to the white, brown, and black complexions, of the greatest intensity of hue. If we can detect the origin of these three, we can easily account for all the other modifications.

CHAPTER II.

ON THE LANGUAGES OF THE AMERICAN INDIANS.

WE cannot undertake to give a particular account of the various languages spoken by the American Indians, for nothing can be more imperfect than the materials, that have been collected for this purpose. Those who seem to have employed themselves most on this part of our subject, confound the understanding, when they enumerate twelve hundred and fourteen languages and dialects, as being spoken on this continent. If it be possible to ever reduce these to their original radicals, the task I apprehend is reserved for our posterity, as a century of labour will be barely sufficient for its accomplishment. In the first place, materials have not yet been even collected, from many extensive districts, and secondly, the least possible reliance can be placed in the vocabularies that have been hitherto made. This observation may surprise those who have not been employed in similar researches; yet nothing is more true; for these comparative vocabularies have been generally made by travellers, traders, and missionaries, who not only had an imperfect knowledge of the Indian languages, but were in great measure, ignorant of the idiomatic peculiarities, by which the Indians express their thoughts. Thus, for instance, the Reverend Mr. Edwards, observes, "if a Mohegan be asked what he calls *the hand* in his language, at the same time that you shew him your hand, he will reply Knisk, which is *your hand*; if you ask the same question, and point to his hand, he will answer Nnisk, *my hand*; and if you point to the hand of a third person, he will say Unisk, *his hand*," &c., and in this manner, any one of these words might find its way into a vocabulary, as the Indian word for *the hand*. This suppositious case of Mr. Edwards has been verified in numerous instances.

But besides such causes of error, there is another of still greater influence, which is thus related by a person well acquainted with Indian languages. Heckewelder observes, that he found himself under very great embarrassment,

when he began to learn the Delaware language. If he pointed to a tree, and asked the Indians how they called *a tree*, they answered, *oak, ash, maple*, as the case might be, so that at last he found in his vocabulary more than a dozen words for *tree*. Thus we see, that the Indians, unlike civilized men, do not abstract or generalize their words, but always use a specific appellation, or the possessive pronoun, or an adjective, in conjunction with the noun. Yet any of the combined words so used, are put in our vocabularies as the Indian term, for that particular substantive. We may have a good idea of the imperfection of the vocabularies so made, when we advert to the variety of adjectives that might be used; for instance, as applied to a tree, *tall, low, thick, leafless, dead, green, hollow, young, old, &c. &c.*, in addition to the specific name, hickory, walnut, ash, &c. It is no doubt to the ignorance of this circumstance, that the Indians are represented to use such long names for simple substances. Again, the Indians incorporate among themselves, individuals of other tribes, who necessarily impart to one language words or peculiarities of diction from another; and the principle of adoption or naturalization being extended even to entire tribes, we may easily conceive, what an encroachment a different language or dialect, would make upon that of the adopting tribe.*

The fact that the Indians incorporated nations and tribes among themselves, is too notorious to require proof; but that they continually introduce individuals, even in numerous instances into their respective societies, is not so well known but that some references will be useful. Henepin, (*Travels*, 288,) relates, that the Iroquois in an excursion against the Illinois, carried off eight hundred women and children. Lewis and Clark, (*Travels*, i, 86,) observe, "we here saw among the Sioux, twenty-five squaws and about the same number of children, who had been taken prisoners about two weeks ago." Smith, (*Hist. Virginia*, 4, 38,) mention instances, where the Indians preserved women as prisoners, while they killed the men. Bosman, (*Hist. Maryland*,) relates an instance of the Susquehannocks carrying off the wives of the Virginia Indians; and Belknap,

* Mr. Heckewelder says, "on the subject of numerals, I have had occasion to observe, they (the Indians,) sometimes differ very much in languages derived from the same stock; which circumstances he was unable to explain. It is accounted for by the observation to which this note is made, and may be further seen, in the comparative vocabulary of numbers in the New York Hist. Coll. iii. 230, where the numbers 3, 4, and 10, are alike in the Chikasaw and the Creek; while all the others are entirely different.

(*Hist. N. Hamp.* i. 100,) relates a similar outrage among those of New England. Now, in all these instances, these individuals remained with their captors, as will be seen when we treat upon the subject of prisoners of war, and whatever language they used, was more or less introduced into the nation. Yet very few persons, if any, when making a vocabulary, inquire, whether the individual who communicated words to them, was well instructed in the language, or not, or whether his mother, father, or himself, belonged originally to the tribe with whom they sojourn.

If to this we add the fact, that there is no settled principle of orthography, defining how these barbarous languages are to be expressed, and that English, French, Germans, Spaniards, &c.,* have made such vocabularies, we can readily conceive the confusion that prevails among them, and how little reliance can be placed upon their labours. Mr. Heckewelder says, the vocabularies he has seen of the languages with which he was well acquainted, abounded in ridiculous mistakes. See also Dobrizhoffer, (*Hist. Abipones*, ii, 159,) for similar observations.

It seems also, to have been not unfrequently a practice with the Indians, to change their words from some superstitious notions. Dobrizhoffer, (*Hist. Abipones*, ii. 203,) has given us very express information on this subject. He says, "the Abipones do not like that any thing should remain, to remind them of the dead, hence appellative words, bearing any affinity with the names of the deceased, are presently abolished. During the first years that I spent among the Abipones, it was usual to say, *Hegmalkam kahamatek*?

* Even persons of the same nation give such different examples, that it seems impossible to reconcile them. See the Nootka numerals as given by Captains Cook and Dixon, Marchand, i. 380.

NUMBERS.	COOK.	DIXON.
I	Tsawack,	Sorwock.
II	Akkla,	Athlac.
III	Katsitsa,	Catsa.
IV	Mo or Moo,	Moo.
V	Sochah,	Soutcha.
VI	Nofpo,	Noctpoo.
VII	Atslepoo,	Atklapoo.
VIII	Altaquolthl,	Athlaquell.
IX	Tsawaquulthl,	Sarvacquell.
X	Haeeoo,	Highhoo.

We may well say with Azara, ii. 154, who, after stating the Machicuyts of Paraguay were divided into nineteen tribes, observes, "il est impossible de prononcer les noms, et encore moins de les écrire—je ne doute pas que si on les dictait à vingt personnes, toutes conviendraient qu'il est impossible de les écrire; et si elles voulaient le faire chacune l'exécuterait d'une manière différente."

When will there be a slaughtering of oxen? On account of the death of some Abipon, the word *kahamatek* was interdicted, and in its stead they were commanded by the voice of a cryer to say, *Hegmalkam negerkata*? The word *nihirenek*, a tiger, was exchanged for *apanigehak*. *Peue*, a crocodile, for *kaeprhak* and *Kaama*, Spaniards, for *Rikil*, because these words bore some resemblance to the names of Abipones, lately deceased. Hence it is that our vocabularies are so full of blots, &c."

Roger Williams, (*Key to Indian Language*, 29,) makes a similar observation, that the Narragansets lay aside their names, as dead when either their sachems or neighbours die, who bore similar names.

As Indian names are derived altogether from sensible objects, or sensible qualities, it is easy to conjecture how much a language would be changed, from this preposterous custom, during the lapse of a few centuries.

The reader will perceive from the foregoing observations, how unsatisfactory must be the attempt, to give a view of the different American languages;* for the chief interest of such a classification, is to determine how much they resemble each other, or how much they differ. Yet that we may not seem altogether to neglect this matter, we will subjoin the following general sketch of original languages, as far as we have been able to trace them, by the researches of other writers.

The whole arctic shore of North America, is possessed by the Esquimaux and Greenlanders, who speak an original tongue called the Karalit.

From the confines of these last, and extending on the western side of the Mississippi as low as the Sascatchawine river, and on the eastern side of the Mississippi as low as the states of Georgia and Tennessee, the Algonquin, Chipeway, or Delaware language, prevails in its numerous dialects. Included in this country, however, is the Wyandot, an original language, spoken by the nation of that name, and the once famous Iroquois or Six nations, who lived in the vicinity of Lakes Erie and Ontario. In all probability, there are other distinct languages west of the Mississippi, but of which we are as yet too ignorant to speak.

*"It is impossible from any vocabularies now existing, to arrange the American languages into their respective families, separating the primitive stocks from one another, and connecting the affiliated dialects; without a personal and intimate knowledge of the various tribes." *North American Review*, for January 1826—34.

In Georgia and Tennessee, the Cherokee and the Muscogulgee or Creek languages, abruptly stop the Algonquin or Chippeway; these will constitute a fourth, and perhaps the fifth original language. From the regions inhabited by these people, to the extremity of Florida on the one hand, and to the Mississippi, on the other, there are several other distinct languages, or widely differing dialects spoken, whose relations to each other or to any original language have been very imperfectly traced; at any rate, too slightly to enable us to speak of them with any precision.

South of the Saskatchewan, and west of the Mississippi, to the frontiers of Mexico, lies an immense country, with which we are most imperfectly acquainted. The Sioux, the Osages, Panis, and Appaches, seem to constitute as many distinct languages. They are at any rate original, when compared with those spoken this side of the Mississippi.

Of the languages spoken from the Esquimaux to California, and between the Rocky mountains and the Pacific ocean, we are in like manner almost entirely ignorant. By far the greatest part of this extensive region, has never been even visited by a civilized man.

In California, there appears to be spoken two or more distinct languages. What relation they bear to others we know not.

On the frontiers of Mexico, the Ottomite language prevails. I have seen a few analogies between it and the Cherokee, (*Silliman's Journal*, iii. 35, &c.) but cannot say any thing concerning its originality.

From these last, as far as Lake Nicaragua, the Mexican or Azteck language is said to prevail; including, however, fifteen or twenty different languages, whose relation to each other are very little understood. The prevailing opinion is, that they are mostly original languages. The northern part of South America, is divided among the Caribs, whose language mixed with some unknown idioms, prevailed on the Atlantic coasts to the equator. The central parts were possessed by the Muyscas, who spoke the Chibcha language. The Peruvian or Quichua language, extended on the side next the Pacific ocean, to Chili. In the central parts of South America, in Brazil, Paraguay, and Buenos Ayres, the Guarani, was the language chiefly spoken; and lastly, the Araucanian, was the language of Chili and Patagonia.

Such, in brief, are the great outlines of the original American languages, sketched in a most inexact manner, and

which may possibly be as much short of the truth, as others have exceeded it in their computations.* We have great doubts concerning the number of the dialects laid down by systematic writers, because of the peculiar circumstances that have attended the formation of the vocabularies, upon which the calculation has chiefly depended, and whose defects we have but just considered. In all probability, instead of the twelve hundred and fourteen, which are attributed to America, there is not a third of that number, unless insignificant peculiarities are resorted to, as constituting a dialect.† The numerous mistakes of Vater,‡ in his classification of those languages belonging to districts with which we are well acquainted, induce us to think, that greater inaccuracies pertain to those classifications of tribes and nations, concerning whom a much greater ignorance prevails.

The question most interesting to the generality of readers, respecting the American languages, is, whether any connexion exists between them and those of any other people of the earth. Though this has been the most direct application of the vocabularies, the comparison of them has been attended with any thing but satisfactory conclusion. The result of the labours of the most extensive collector of com-

* Since writing the above, I have been favoured by professor Rafinesque, with a tabular view of the original languages of America, which is here subjoined, according to his nomenclature. It will be seen that he agrees very nearly with me, by estimating them but twenty-five in number at farthest, though he thinks a more complete investigation, may possibly reduce them to but eighteen. Thus, for instance, 4 and 5, may be found to be the same, so also, 6, 7, 8, and 9, 10, 11, as they have considerable analogies with each other, 15, 16, and 19, approximate also by gradual dialects, with 17, 18, 20.

Original American Languages according to Professor Rafinesque.

NORTH AMERICA.

1. *Uskih*, Esquimaux, &c.
2. *Onguy*, Wyandot, &c.
3. *Lenap*, Chippeway, &c.
4. *Wacash*, North West Coast.
5. *Skere*, Paunee, &c.
6. *Nachez*, Natchez, &c.
7. *Capaha*, Sioux, &c.
8. *Chactah*, Choctaw, &c.
9. *Otaly*, Cherokee, &c.
10. *Atalan*, Tarascan, &c.
11. *Otomi*, Otomi, &c.
12. *Azteck*, Mexican, &c.
13. *Maya*, Huasteca, &c.
14. *Chontal*, Tzendal, &c.

SOUTH AMERICA.

15. *Aruac*, Arrowack, &c.
16. *Calina*, Caraib, &c.
17. *Puris*, Mayapuris, &c.
18. *Yarua*, Betoy, Charua, &c.
19. *Cuna*, Darien, Choco, &c.
20. *Mayna*, Yameos, &c.
21. *Maca*, Muhizca, &c.
22. *Guarani*, Guarani, &c.
23. *Maran*, Peruvian, &c.
24. *Lule*, Abipone, &c.
25. *Chili*, Araucanian, &c.

† Professor Rafinesque informs me, that if the languages of Europe had been subdivided, as has been done with those of America, we should have sixty languages in France, one hundred in Italy, &c.

‡ See North American Review, for January 1826, p. 34, &c.

parative words, is thus given by Malte Brun, (*Geog.* v. 35,) from Vater's Researches, for being ignorant of the German language, we are obliged to quote at second hand. "The number of analogous words discovered between the various American languages, and other parts of the world, are with the Coptic and Japanese, eight words; with the Malay, eleven; the Sanscrit, five; with the west coast of Africa, twenty; with the Biscayan, eight; the Celtic, nineteen; the Caucasian, nine."

These comparisons amount to nothing, for the analogies are taken indiscriminately from among the twelve hundred and fourteen dialects, which professor Vater attributes to America, and when we find Africa affording the greatest number, I presume no one will expect to see the mystery of the origin of the American Indians, elucidated by philology.

The late Dr. Barton of Philadelphia, was many years employed in a similar research, and with about the same success. Though he thought himself justified to conclude, that the original population of America was from Asia, yet the editor of Rees's Cyclopaedia, well observes, "that when similarities equally striking, though not so numerous, are also pointed out between the language of the Society and Friendly islands, Easter island, the Marquesas, and certain North American tribes, nay, when the Doctor informs us, that he has discovered striking affinities between the language of these last, and of the Yalofs, one of the blackest nations of Africa, the mind instead of resting on the stability of conviction, is again lost in an endless and perplexing labyrinth of conjecture."

An attempt has also been made, to compare languages together, by translating into various idioms some well known sentence. This though ingenious, has been entirely unsatisfactory, from our ignorance of the elliptical expressions, into which a language throws itself according to its peculiar genius. Thus, though the Delaware and Massachusetts Indian languages, are most indubitably dialects of the same language, yet if the Lord's prayer, as translated by Eliot in his Bible, be compared with that given by Heckewelder in Trans. Hist. and Lit. Committee, there will not be found two words in these two examples, bearing the least affinity to each other. The reason of this may be from various causes, but unless a person be grammatically instructed in the two dialects, who would have suspected their relationship, when not the least resemblance between them is to be discerned.

We may therefore safely assert, that hitherto, no general resemblance has been detected between the words of the American languages, and those of the eastern continent, which may not with more plausibility be referred to the one common origin of the human race, than to the affiliation of any one nation from the other.*

The philologists have themselves become aware of the errors of their comparative vocabularies; and the ill success they have met with in tracing the descent of nations by comparing single words, has induced them to examine languages according to their idiomatic or syntactic arrangements. Baron Humboldt, whose extraordinary powers of mind have made him intimate with the most opposite classes of science, observes, "I am well aware that languages are much more strongly characterised by their structure and grammatical forms, than by the analogy of their sounds and of their roots, and that this analogy of sounds is something so disfigured in the different dialects of the same tongue, as not to be distinguished." &c. (*Personal Narrative*, iii. 251.)

I venture on a consideration of the syntactic arrangements of language, as applicable to our subject, with some hesitation; for, in addition to the general obscurity that we have shewn hangs over the Indian languages, I find myself in opposition to the views that philologists have brought forward concerning their idiomatic construction. To enter into a critical analysis of the subject, not only requires a most extensive knowledge of ancient and modern languages, but also a mind peculiarly formed by nature, one of great metaphysical nicety of perception, to unravel the intricacies of forms of words developing thought, in a manner entirely different from those to which we are accustomed, and in both of these particulars I cannot hesitate to express a sense of my deficiencies.

Nevertheless, the subject is interesting, and since a certain general attention has been directed to its investigation, we feel compelled as it were to make an exposition, at least as far as light has been thrown on it, or as far as we have been able to comprehend the details.

These researches into the idiomatic formations of language, have been chiefly confined to the German literati, and it is only through imperfect accounts given by travellers and very

* It is admitted that the languages of the Esquimaux and the Tschutchi of the eastern extremity of Asia, have a striking resemblance to each other. Most writers who have been aware of this fact, derive the latter from America. I am not prepared to decide on this matter, which is involved with some other particulars not easy to explain.

general critics, that we have been enabled to comprehend their views on this subject. Mr. Du Ponceau of Philadelphia, of whom we must make most honourable mention, has added essentially to our previously limited knowledge, by extensive philological inquiries, published in various works, pertaining to the history of the Indian languages. To him we confess the greatest obligations, especially as the works of Vater, Schlegel, and other such writers in the German language continue untranslated.

As far as concerns our subject, Mr. Du Ponceau considers himself justified in making the following declarations.

1st. That the American languages in general, are rich in words and in grammatical forms, and that in their complicated construction, the greatest order, method, and regularity prevail.

2d. That these complicated forms, called by him *Polysynthetic*,* appear to exist in all those languages from Greenland to Cape Horn.

3d. That these forms appear to differ essentially, from those of the ancient and modern languages of the old hemisphere.

Such are the general views of Mr. Du Ponceau, and several other philologists upon this subject, which apparently would require much time and labour to examine. We shall not, however, enter into any minute investigation of them, but keeping the propositions constantly in view, will attempt to lay before our readers, such a general view of the construction of the Indian languages, as may furnish a tolerable commentary upon these philological opinions.

As the grammatical construction, of the Indian languages throughout the continent is asserted to be similar, we shall, to illustrate our subject, investigate the principles of the language of the Massachusetts Indians, as we have at our hand

* "The Polysynthetic construction is that, by which the greatest number of ideas are comprised in the least number of words. This is done principally in two ways, 1st. By a mode of compounding locutions, which is not confined by joining two words together, as in the Greek, or varying the inflection or termination of a radical word, as in the most European languages, but by interweaving together, the most significant sounds or syllables of each simple word, so as to form a compound, that will awaken in the mind at once, all the ideas singly expressed, by the words from which they are taken. 2d. By an analogous combination, the various parts of speech, particularly by means of the verb, so that its various forms and inflections will express, not only the principal action, but the greatest possible number of the moral ideas, and physical objects connected with it, and will combine itself to the greatest extent with those conceptions, which are the subject of other parts of speech, and which in other languages require to be expressed by separate and distinct words. Such I take to be the general character of the Indian languages." (*Mr. Du Ponceau. Hist. and Lit. Trans. xxx.*)

the writings of the Rev. Mr. Eliot, and Dr. Jonathan Edwards, who lived among nearly the same tribe, and being both very concise, * may be supposed to exhibit more expressly, the peculiarities of that form of speech.

In attempting to convey to the reader an idea of the idiomatic construction of the Indian languages, it must be understood, that we do so with the view of explaining their peculiarities alone, and not to point out how these languages originated. We believe that God who made man an intellectual and social animal, gave him speech, that he might fulfil the great purposes of his being; but in what manner he was enabled to connect ideas with sounds and modifications of sounds, so as to establish the various parts of speech, and forms of language, we profess entire ignorance, even after some tiresome reading of essays on this subject, from the pens of learned writers. We shall therefore say nothing on this subject, but simply take the Indian grammars that lay before us, and from them, endeavour to shew in what manner the aborigines of America used their words. Perhaps this expression is too general, but as Humboldt, Du Ponceau, and other learned men, have affirmed that a similarity of idiomatic structure prevails throughout America, we feel compelled to adopt this general theory, at least until it be disproved, which we have not the means of doing, as may be seen from our preceding observations on this subject. Even the limited plan we have assigned ourselves, of investigating one language alone, has been found to involve so many difficulties, from the conciseness of the Indian grammars, and want of explanation, that we do not hesitate to say, it has been the most perplexing and unsatisfactory part of our researches.

The Massachusetts Indians, whose language we shall assume as the representative of all others in America, divided their words into articles, nouns, pronouns, adjectives, verbs, adverbs, conjunctions, and interjections, if this last can be called a part of speech.

As the *pronouns*, appear to perform the most important part of Indian speech, we shall first notice them, as they are the scaffolding by which every thing else is built up and accomplished. If their use be fairly comprehended, it seems

* Yet on the other hand, conciseness is the universal fault of all the Indian Grammars I have seen. That of Zeisberger which we owe to the care and industry of Mr. Du Ponceau, is nearly destitute of explanations and rules, though the examples of grammatical forms are numerous. I am not however satisfied with this grammar, believing that the author has followed a very artificial system of arrangement, not justified by any thing I can perceive, in the peculiarity of Indian grammatical constructions.

to us there is little difficulty in perceiving the whole grammatical construction of the language. These pronouns are both personal and possessive, and are as follow:

SINGULAR.

Neen—I, me, or my.

Ken—Thou, or thee, thy.

Noh or nagum—He, she, it, his.

PLURAL.

Neenawun or Kenawun—We, us, our.

Kenaau—Ye, your.

Nahoh or Nagoh—They, them, their.

Nothing can be more simple; and the various senses in which they are to be understood, will be easily perceived with a little attention and practice. The reader will also remark, that the plurals* are formed directly from the singular, by the addition of the letters, *un—au—oh*, with some euphonic letters.

When these personal or possessive pronouns are used with another word, they are according to the genius of the language, contracted for the first and second persons, into Ne, and Ke, which we consider better expressed, by N', K', making a harsh aspirate, whose character is given by these letters. Instead of Noh, or Nahoh, in the third persons, an aspirated sound is given which is that of the letter W, as pronounced in *work, world, &c.* For an example we subjoin the following word, ME-TAH *the heart*.

SINGULAR.

N'tah, *my heart*,K'tah, *thy heart*,W'tah, *his, her or its heart*.

PLURAL.

N'tahhun, *our heart*,K'tahhou, *your heart*,W'tahhou, *their heart*.†

It will be seen that the prefixes, are the same singular and plural; but the plurals, suffix the letters, *un, ou, ou* with *h* euphonic. These are the same terminations that we remarked above on the pronouns, as distinguishing their plurals, from the singular, but here they are suffixed to the word *tah*. The same features may be observed in the use of all their other words, which we will not fail to observe in the course of our

* The Europeo-Indian philologers, make mention of a kind of plural which they call the *particular*, or *American plural*, which signifies according to them, *we, us*, in relation to a *particular* number of persons, distinguished from an indefinite number. This particular plural is not noticed by Eliot, Edwards, or Zeisberger, but Mr. Heckewelder, (*Trans. Hist. and Lit. Com.* 429.) describes it distinctly. Mr. Duponceau thinks that Neenawun, of our example, is this very plural, which should be distinguished from Kenawun, the indefinite plural.

† Notwithstanding this example in which the personal pronouns are entirely possessive, it would seem that there is a different manner of expressing possession, which is thus mentioned by Eliot. "The possessive rank of nouns is when the person doth challenge an interest in the thing. And it is made by adding the syllable *eum* or *oom*, according to euphony, unto the noun with its proper prefix: for example, N'Mannitoom, *my God*; N'nun-kompoom, *my man*, &c.

progress with this subject, as discriminating between singular and plural signification.

The Indians do not regard sex, but divide their nouns substantive, into animate, and inanimate. There is no distinction between these two genders in their singular termination, though it is well marked in their plurals.

The animate nouns, make their plural by adding *og*, to the singular after various euphonic letters; as

Nunkomp—a young man.
Nusquau—a young woman.

Nunkompaog—*young men*.
Nunsquoag—*young women*.

The inanimate make their plural in *ash*, with due euphony, as

Hussun—a stone.
Mehtug—a tree.

Hussunash—*stones*.
Metugquash—*trees*.

Certain anomalies prevail in their genders; as for instance, the stars are animate; the different parts of the body are inanimate; the virtues and vices are inanimate; &c.

The numbers are two, singular and plural.

Their nouns are not varied by terminations, or by the use of particles, but by prefixing the personal and possessive pronouns, as may be seen in the following example.

NUTCHEG—(*a*) *hand*.

SINGULAR.

N'nutcheq—*my hand*,
K'nutcheq—*thy hand*,
W'nutcheq—*his or her, or its hand*.

N'nutheganun—*our hand*,
K'nutheganou—*your hand*,
W'nutheganou—*their hand*.

PLURAL.

N'nutheganash,
K'nuthegash or K'nutheganash,
W'nuthegash or W'nutheganash,
N'nutheganunonut,
K'nutheganooowout,
W'nutheganooowout,

my hands.
thy hands.
his or her, or its hands.
our hands.
your hands.
their hands.

In this example it will be seen that the noun is inanimate, by the termination *gash*, in the plural. But the last three persons of the plural have a different termination, which is in reality a reduplication of the plural persons singular, with *ut* added for euphony, or as a suppletive, which continually occurs in this language. (*See Eliot, pages 8, 23.*) Though this is an anomaly in this noun, Eliot makes no observation upon it, which will convey an idea of the carelessness with which his grammar has been written; as it is the only substantive he introduces, to shew the peculiarity of the declensions. But the word I presume is undoubtedly correct, for we find the same reduplication used by the Delaware Indians: See Zeisberger's Grammar, 38, and example N'ooch, *my father*; N'oochena, *our father*; N'oochenana, *our fath-*

ers. But according to Eliot's rule, the words should terminate in *gashun*, *gashou*, &c. as an inanimate noun, and we know not how to explain this departure, unless by the supposition, that the Indian grammatical rules, throw a very light restraint on their forms of speech, and that little regard is paid to genders, &c. by speakers in general.

Though the manner in which the Indians use their nouns seems very peculiar, I rather think that impression will be found to arise from the abstract manner, we are accustomed to learn our own, or the learned languages,* while the Indians unaccustomed to abstractions, use their words in their restricted or proper sense alone. But with certain idiomatic peculiarities, they do express the sense of our cases. On this subject, however, our information is very meagre, and we shall be obliged to use all our books on the different Indian dialects, to make this matter plausible.

Zeisberger says, (*page 37*.) that the genitive is expressed among the Delawares, by placing the noun employed in that sense, immediately before that, which is used in the nominative; as *Getannittowit quisal*, *God's son*.

The dative, is expressed by the sense given from the verb used with the noun; as *N'milan*, "*I give him*," i. e. I give to him.

The accusative, is also expressed actively by the verb, as *N'dahoala*, *I love him*.

The vocative is expressed in the singular by the termination *an*, and in the plural by *enk*, as *W'tochemellan*, *O, my father*; *Wetochemellenk*, *O, our father*.

* The declension of nouns in our own language, as in the Greek or Latin, is learned entirely abstractedly. We say of a man; to a man; of a father, from a father; &c. But the Indians have no use for words in their abstract sense. Thus the Rev. Mr. Edwards says, an Indian cannot use the word *father* in an abstract sense. They can say *N'ogh my father*, *K'ogh thy father*, &c. but if you were to strip the word of the affixes, *N'my*, and *K'thy*, and use the word *ogh*, a Mohegan would stare and smile. The same observation is applicable to mother, brother, sister, son, head, hand, foot, &c. and in short to those things in general, which necessarily in their natural state belong to some person. A hatchet is sometimes found without an owner; and therefore they sometimes have occasion to speak of it absolutely, or without referring it to an owner, but as head, hand, &c. naturally belong to some person, and they have no occasion to speak of them without referring to the person to whom they belong, so they have no words to express them absolutely."

This is in reality the case with every rude nation. Thus the people of Java, in the Indian ocean, have two or three names for each metal, but have no word equivalent to the general term *metal*. They have five names for a dog; six for a hog or elephant; seven for a horse; but they have no word or term signifying *animal*, as an abstract noun. (*Crawford's Hist. Indian Archip.* ii. 8.)

The ablative or local case, is formed by means of the suffixes *ink* and *unk*, which express in, on, out of, as Utenink N'da, *I am going into town*; Utenink N'oon, *I am coming out of town*.

The Rev. Mr. Edwards says, the Mohegan Indians have the prepositions Anneh *to*, and Ocheh *from*, in their dialect: but that *to*, and *from*, are almost always expressed by an alteration of the verb. Thus if I would say, I ride *to* Stockbridge, whose Indian name is Wnoghquetookoke; I must not say anneh Wnoghquetookoke n'doghpeh, but must say Wnoghquetookoke n'dannetoghpeh; and to say I ride *from* Stockbridge, we must not prefix ocheh, but must say Wnoghquetookoke n'ochetogpeh.

Notwithstanding our respect for the authority of Mr. Edwards, we think him mistaken in the example he has given; for it appears to us only an idiomatic peculiarity in affixing the prepositions and not by an alteration of the verb, for both *to*, and *from*, are distinctly expressed. In the first example, it is only the euphonic letter *d*, before the vowel, that occasions the apparent change of the verb, as the simple inspection of the word, alone seems to shew. In the last example, the preposition is distinctly prefixed to the verb.

Eliot in but one instance informs us, how the Massachusetts Indians express a case, which is that of the ablative. This is done by adding *ut* or *it* to the word; thus, N'eeek *is my house*; N'eeekit *is in my house*.

The Massachusetts Indians have adjectives in their language, that agree with noun and pronoun, in number, person, and gender, and which are either animate or inanimate.

The animate adjective singular, according to Eliot, ends in *es* or *esu*, the plural, like animate nouns, ends in *og*.

The inanimate singular, ends in *i* or *e*, and the plural in *ash*, like the inanimate nouns; for instance,

	SINGULAR.	PLURAL.
Animate.	Wompēs—(<i>white</i> ,)	Wompésuog.
	Mooesu—(<i>black</i> ,)	Mooesuog.
Inanimate.	Wompi—(<i>white</i> ,)	Wompiyeuash.
	Mooi—(<i>black</i> ,)	Mooesuash.

When the adjective is used with a noun, the two words are generally contracted together into one word, thus *Womposketomp* is a white man, and is compounded of *Wompes white*, and *Wosketomp man*, &c.

The degrees of comparison, are expressed by words signifying *more*, and *more and more*; *much*, *small*, &c.

The general opinion is, that Indians have few proper adjectives,* and that they express the qualities of substantives by neuter verbs. We consider this a mistake, arising from a peculiarity in the use of the personal pronouns, which supply, as we shall presently see, the want of the substantive verb *to be*; and the possessive pronouns, that serve for the auxiliary verb *to have*; which two verbs are at least, generally wanting in the Indian languages.

From this defect, it will be seen at once, that any noun or adjective becomes as it were a verb, simply by affixing the pronouns: for the sense in which they are used, shew the substantive verb to be understood: thus, Wosketomp is a man, prefix the inseparable pronoun N', and it is N'wosketomp, *I am*; that is, *I am a man*. K'wosketomp, *thou art*; that is, *thou art a man*, &c. And thus, the adjective Wompes, *white*, with the prefixes, becomes N'wompes, *I am white*; i. e. *I am white*; K'wompes, *thou art white*; i. e. *thou art white*, &c. And thus the reader can readily perceive, that almost any word in the language can be thrown into the form of a verb: but it is no more a verb proper, than the same words are verbs in the English language.

We have already observed, that the pronouns were the most important parts of speech in the Indian languages; we have shewn this in their usage of nouns and adjectives; and they will appear in like manner, according to our apprehension, to be the essential parts of the verb. In the right understanding that the personal pronouns, impliedly signify according to sense, the substantive verb *to be*, and the auxiliary *to have*, in connexion with their meaning as pronouns, will be found an easy solution of all the exaggerated forms of the Indian verbs, whose paradigms confound the reader with the multiplicity of their conjugations, forms, transitions, &c., which as far as I can perceive, are formed of a variety of words compounded together according to the required sense, but which the Indian grammarians blend together as one word.

Notwithstanding the multiplied conjugations and forms, that have been ascribed to the Indian verbs, we cannot perceive in the grammars we have consulted, in reality more

* The Rev. Mr. Edwards says, "the Mohegans have no adjective in all their language, unless we reckon numerals, and such words as, *all*, *many*, &c. adjectives. Of adjectives that express the qualities of substances, I do not find they have any.

They express those qualities by neuter verbs; as W'nissoo, *he is beautiful*; pehtunquissoo, *he is tall*; W'sconmoo, *he is malicious*, &c. Thus in the Latin many qualities are expressed by verbs neuter, as valeo, caleo, frigeo," &c.

than one form; though we shall for the present allow them two. One of these employs the verb in the neuter sense, and the other is properly transitive; but which we think better denominated by the Indian grammarians "personal verbs." We shall give an example of the neuter verb, to shew its grammatical construction; and such part of a personal verb, as may be deemed sufficient for our general purpose. The verb we propose to exhibit is one given by Eliot in his grammar, as illustrating the simplest form of verbs, it is N'waantam, *I am wise*.

In strictness, we consider this verb, to be the adjective *wise*, in conjunction with the several personal pronouns, but thrown into a verbal form. The substantive verb *to be*, is distinctly conveyed in sense by the pronouns.

INDICATIVE MOOD.

PRESENT TENSE.

Singular.	Plural.
N'waantam, <i>I (am) wise,</i> K'waantam, <i>thou (art) wise,</i> W'aantam noh, <i>he (is) wise.</i>	N'waantamumuh, <i>we (are) wise,</i> K'waantamumwoo, <i>ye (are) wise,</i> W'aantamwog, <i>they (are) wise.</i>

PERFECT TENSE.

Singular.	Plural.
N'waantamup, <i>I was wise,</i> K'waantamup, <i>thou wast wise,</i> W'aantamup, <i>he was wise.</i>	N'waantamumunonup, <i>we were wise,</i> K'waantamumwop, <i>ye were wise,</i> W'aantamupaneg, <i>they were wise.</i>

IMPERATIVE MOOD.

Singular.	Plural.
Waantash } <i>be thou wise.</i> Waantaj }	Waantamuttuh, <i>be ye wise.</i> Waantamook } <i>be they wise.</i> Waantamohettich }

OPTATIVE MOOD.

PRESENT TENSE.

Singular.
N'waantamun-toh, <i>I wish I were wise,</i> K'waantamun-toh, <i>you wish you were wise,</i> W'aantamun-toh, <i>he wishes he was wise.</i>

Plural.

N'waantamunan-toh, <i>we wish we were wise,</i> K'waantamunan-toh, <i>ye wish ye were wise,</i> W'aantamuneau-toh, <i>they wish they were wise.</i>

PERFECT TENSE.

Singular.

N'waantamunaz-toh, <i>I wish I had been wise,</i> K'waantamunaz-toh, <i>thou wishest thou had been wise,</i> W'aantamunaz-toh, <i>he wishes he had been wise.</i>

Plural.

N'waantamunanoiz-toh, <i>we wish we had been wise,</i> K'waantamunaoiz-toh, <i>ye wish ye had been wise,</i> W'aantamunaoiz-toh, <i>they wish they had been wise.</i>

SUPPOSITIVE MOOD.

PRESENT TENSE.

Singular.

Waantamon, *if I was wise,*
 Waantaman, *if thou wast wise,*
 Waantog, *if he was wise.*

Plural.

Waantamog, *if we were wise,*
 Waantamog, *if ye were wise,*
 Waantamohettit, *if they were wise.*

PERFECT TENSE.

Singular.

Waantamos, *if I had been wise,*
 Waantamas, *if thou had been wise,*
 Waantogkis, *if he had been wise.*

Plural.

Waantamogkis, *if we had been wise,*
 Waantamogkis, *if ye had been wise,*
 Waantamohettis, *if they had been wise.*

INFINITIVE.

Waantamunat, *to be wise.*

Eliot, from whom this paradigm has been taken, has not affixed any English signification to it, which however is essential to a correct understanding of the Indian verbal sense. I have attempted to give his meaning, but do not vouch for more than a general accuracy, nor is there any one within several hundred miles, to whom I could apply for information. If any of my readers look into these forms with philological scrutiny, they must take the verb as Eliot gives it, omitting my translation.

On examining the different personalities of this verb, we find, that the present tense indicative, is constructed exactly like the declension of the noun. We may perceive the same prefixes, both singular and plural, and the same plural affixes, that belong to the plural pronouns, or plural use of the nouns.

The perfect tense, differs only from the present, by the addition of the letters *up*, which are added to the end of the different persons, and which implies a perfected sense. Whether it be really a verbal termination, or some contracted particle, I know not.

How the imperative mood is formed, I cannot perceive, but consider it most probable, that the *ash*, and *aj*, are euphonic suppletives, the tone of whose expression denotes command. Eliot says, there is no formation by which we can express petition, as *let me be wise*; but that to convey the sense of this prayer, we must add the word *pa*, to the present indicative, thus *Pa N'waantam, let me be wise.*

The optative mood, present tense, is, according to our views, the present tense indicative, with the euphonic letters *un* added, in order to express distinctly the sound of the adverb *toh*, wish, the same as the latin word *utinam*.

The perfect tense adds *az* and *oiz*, according to Eliot's orthography, to the present indicative, which seemingly implies verbal inflection; but this can hardly be the case, as the

adverb *toh*, is in like manner added to make the sense; most probably, therefore, they are only euphonic sounds.

The suppositive mood, has no pronouns prefixed, but seems to have them affixed, with other letters, probably euphonic. The sense is most probably dependant on the significant manner in which the phrase was used.

The infinitive, is said to be the radical with the termination *at* annexed; but I consider this inaccurate, and that the Indians, properly speaking, had no infinitive. According to Eliot himself, (*Grammar* 24,) the sense of the infinitive mood is given by one verb being preceded by another. The Rev. Mr. Edwards expressly says, the Mohegans never use a verb in the infinitive mood, or indeed in any abstract sense, which is confirmed by the North American Review. (*Jan.* 1826, p. 30.)

The reader cannot have failed to remark, that there is no future tense given in this paradigm. Eliot says, the sense of the future is given by adding to the present indicative the words, *mos*, *pish*, signifying *shall*, or *will*, or *futurity*; yet he might as well have introduced this tense as his optative mood, which is equally a compounded phrase. But in all probability, the future tense is chiefly understood among the Indians, from its absolutely necessary connexion with the time of the action; as for instance, Mr. Edwards says, "to express both the past and the future, they generally use the form of the present tense, as Wnukwoh n'diotuwohpoh, *yesterday I fought*, or wnukuwoh n'diotuwoh, *yesterday I fight*; n'diotuwauch wupkoh, *I shall fight to-morrow*; or wupkauch n'diotuwoh, *to-morrow I fight*. In this last case the variation of *wupkoh* to *wupkauch*, denotes the future tense, and this variation is in the word *to-morrow*, not in the word *to fight*."

Eliot subjoins to this paradigm, one of the same verb in its negative form, but which we cannot think entitled to any particular consideration, as it is precisely the same verb with the adverb "mo," *not*, added to it, and can no more be considered a verb, than the vulgar phrase, *I a'nt wise*, *you a'nt wise*, &c. which might also be carried through a regular conjugation.

Having thus given an example of an Indian verb in its most simple form, we now pass on to some of those apparently complicated verbal forms, that have so much excited the attention of philologists. The one we propose exhibiting in part, is of the personal form; which we consider to be the only one in use among these people, where the sense is not

confined as in neuter verbs. Neither do we perceive it to be so much a verb, as a conjugated phrase; which our own language with a little alteration of spelling, can be made to represent precisely.

In the preceding paradigm, the pronouns were alone prefixed, in the following they are both prefixed and suffixed; for it appears they never use a verb in an abstract sense. The Rev. Mr. Edwards observes, "The Mohegans never use a verb in the infinitive mood, or without a nominative or agent, and never use a transitive verb, without expressing both the agent and the object, corresponding to the nominative and accusative cases in Latin. Thus, they can neither say, *to love*, nor, *I love*, *thou givest*, &c. but, they say, *I love thee*, *thou givest him*, &c.*

"Another peculiarity is, that the nominative and accusative pronouns prefixed and suffixed, are always used, even though other nominatives and accusatives be expressed: thus they cannot say, *John loves Peter*, they always say, *John he loves him*, *Peter*; John *uduhwhunuw* Peteran. Hence, when the Indians begin to speak English, they universally express themselves according to this idiom."

For an example, I subjoin the indicative mood, present tense, of the verb *paum*, which is according to Eliot the Indian adoption of our English verb *to pay*. The reason the venerable missionary assigns, for introducing it in his grammar, is equally applicable to our purpose, "that we can thus better perceive what are the grammatical forms of the language, they being added throughout to the radical *paum*."

INDICATIVE MOOD.
PRESENT TENSE.

Singular.	Plural.
K'paumush, <i>I pay thee.</i>	K'paumunumun, <i>we pay thee.</i>
N'payum, <i>I pay him.</i>	N'paumoun, <i>we pay him.</i>
K'paumunumwoo, <i>I pay ye.</i>	K'paumunumun, <i>we pay ye.</i>
N'paumoog, <i>I pay them.</i>	N'paumounonog, <i>we pay them.</i>
K'paumeh, <i>thou payest me.</i>	K'paumimwoo, <i>ye pay me.</i>
K'paum, <i>thou payest him.</i>	K'paumau, <i>ye pay him.</i>
K'paumimun, <i>thou payest us.</i>	K'paumimun, <i>ye pay us.</i>
K'paumoog, <i>thou payest them.</i>	K'paumoog, <i>ye pay them.</i>
N'paumuk, <i>he payeth me.</i>	N'paumukquog, <i>they pay me.</i>
K'paumuk, <i>he payeth thee.</i>	K'paumukquog, <i>they pay thee.</i>
U'paumuh, <i>he payeth him.</i>	Upaumouh, <i>they pay him.</i>
K'paumukqun, <i>he payeth us.</i>	N'pauumukqunonog, <i>they pay us.</i>
K'paumukou, <i>he payeth ye.</i>	K'paumukoog, <i>they pay ye.</i>
Upaumuh nah, <i>he payeth them.</i>	Upaumouh nah, <i>they pay them.</i>

* An Indian cannot say *I love*, *I hate*, *I fear*, abstracted from the operation of the verb upon the object. He must say, *friend I love him*, *enemy I hate him*, *bear I fear him*. (*N. A. Review*, Jan. 1826, p. 30.)

The reader from this specimen of the present tense alone, may form some idea of the number of pages it would require to complete the paradigm for this personal form; and how impossible it would be, in so general an essay as the present, to introduce the reflected, compulsive, meditative, communicative, reverential, frequentative, and other circumstantial forms, which philologists have attributed to the Indian languages.

At first sight, this verb *paum* appears to be inflected by terminations, as well as by prefixes; but a little examination will shew, that each personality is three distinct words, which really constitute a phrase, blended and contracted into one word, according to the genius of the Indian languages; whose remarkable power in contracting compound words, we shall presently notice. But if we were to express English words according to their sound alone, as has been done with the Indian verb, instead of writing I pay you, it would be *Ipayu*; for he pays you, it would be *hepaysu*; for I pay him, *Ipayim*; for you pay him, *upayim*, &c.

It is possible, this may not be the case entirely, with the Indian verb, but if we can shew it to be a distinguishing feature in most of its parts, with the very inconsiderable knowledge we have of its elements, we may by fair analogy infer it generally throughout its formation, especially, when we shall have shewn how difficult it is for an European ear, to detect the various radicals, when compounded together into the one word, by which the sense is conveyed.

Should any one think, I am taking an unjustifiable liberty with the spelling of the Indian words as given by Eliot, I would beg him to remember, that his orthography was made after his own ideas of the sound of the Indian words, and is without doubt, very inaccurate when compared with what the Moravians have done for the language of the Delaware Indians. But I shall not so much change the sounds, as express them by other letters, which have what I deem the fact, the characteristic sounds of the language; the most important of which will be to insert the W' sound, of which we spoke when treating of the third personal pronouns, both singular and plural. This particular sound might be expressed nearly by oo, or uo; but we prefer using the W, as it will mark more precisely the distinction, in the instances where we think those pronouns manifest their presence.

The letters added for sake of euphony, are very numerous in Eliot's orthography; though not so much so in the example given, as in other parts of the same paradigm. These

euphonic sounds of all others, the most difficult to ascertain in an unwritten language, are introduced by him chiefly in *m*, *n*, *oo*, *p*, *q*, *t*, *u*, *z*, &c. combined with different vowels, which add materially to the apparent length of the words. He also says, we must read *paum*, *paym*, though he spells it constantly, *paum*.

I consider the example already given, is to be thus parsed:

K'paumush, *K* is the pronoun thou or thee; *paumush* signifies in this combination, *I pay*; the *sh* suffixed, I cannot detect, but the words are *thee pay I*.

N'payum—it should be N'pay'w'm; *N* is the pronoun I; *pay* the radical; *w* is the pronoun *him*, blended with the *m* of the noot.

K'paumunumwoo—seems to be, K'paum uN' umwou; literally *you pay I*, but with the plural termination *wou*, shews it to be *ye*. I do not however see clearly the composition of this phrase.

N'paumoog—is explicitly, N' *I*, *paum*, *pay*, og *them*: this last is the contraction of the demonstrative pronoun, *yeug*, *these* or *them*.

K'paumeh—is, K' *thou*, *paumeh payeth me*. I do not recognize the pronoun *I*, in this expression.

K'paum—*thou payest him*; it should be K'pau'w'm: the *w* blended with the radical, marks the pronoun *him*.

K'paumimun—is K, *thou*; *paum*, *payeth*; *imun*, *us*; the *un*, is the last part of the pronoun Neenawun, *we*; the other letters are euphonic.

K'paumoog—is K'*thou*; *paum payeth*; og, or *yeug them*.

N'paumuk—is N', *me*; *paum*, *payeth*; w'k *he*; the *k* for euphony.

K'paumuk—is K', *paum'wk*; K', *thee*; *paum*, *payeth*; w'k, *him*; as before.

Upaumuh—should be, W'paum'w; literally, *he payeth he*.

K'paumukqun—is embarrassed by the plural termination being added after the pronoun *w*, represented by Eliot in the *u*, which precedes the *k*. The word probably should have been written, K'paum'w'kun.

K'paumukou—considered similar in construction with the preceding.

Upaumuh-nah—is distinctly marked, but should be W'paum-uh-nah, W', *he*; *paum*, *payeth*; nah, *them*; the *uh* for euphony.

With this example of parsing, any one may detect the plural pronouns in the remaining parts of the paradigm, we do not think it necessary to go further in the analysis.

Though we may not have succeeded in shewing that every personality of this Indian verb, exhibits three distinct words, yet it is so apparent in the far greater number we have examined, that it seems no one can reasonably deny, that this personal verb, as it is called, is but a conjugated phrase, arranged in every possible manner it could be used in a spoken language; and which may with additional words, be carried through all possible moods and tenses, as it has been done by Eliot and other Indian grammarians.

As for the circumstantial forms, they appear in like manner to be phrases compounded of pronouns, adverbs, adjectives, and other parts of speech, which are or may be used in a verbal form: and which, according to my apprehension, are no ways peculiar to the American Indians; for they are constantly used in those forms among ourselves, and may be varied to an almost infinite degree. But the Indians have an advantage over us, in the singular peculiarity by which they contract these various words into apparently one word. In this remarkable feature will be found, I think, the only claim the Indians have to richness of language, for their grammatical forms seem to hang together, with a very loose accommodating generality of expression, to which it is necessary to add gestures or significant looks, to make them intelligible.*

There is, says an able writer in the *North American Review*, "in all our Indian languages a strong tendency to combination. We believe they were originally monosyllabic in their formation, and extremely limited in their application. Even now, at least one fourth part of the Chippeway words are monosyllables. As the poverty of these languages became apparent, and necessity required the introduction of new terms, they were formed by the combinations of words already existing. It is not easy to define the limits of this principle, nor to analyse the rules of its application; some letters are omitted, and the changes are frequently so great, as to render it difficult to reduce the words to their original elements."

* "No man has ever seen an Indian in conversation without being sensible, that the head and the hands, and the body, are all put in requisition, to aid the tongue in the performance of its appropriate duty." *N. A. Review*, January, 1826.

A similar character is given of the Greenlanders, who "accompany many words not only with a particular accent, but with a certain significant look, which is necessary to be regarded, in order to ascertain their meaning." *Rees's Cyclopaedia*, Art. *Greenland*.

Juarros says of the Indians of Guatemala, that "the enunciation of words with more or less force, frequently conveys a different, and sometimes an opposite signification." *Hist. of Guatemala*, 199.

Mr. Heckewelder, has given us a few examples of the manner in which the several words of a phrase are contracted into one word, which displays so minutely this peculiarity, that we shall introduce them in the present page. The word nadholineen in the Delaware language, means according to him, (*Trans. Hist. and Lit. Com.* 406,) "*come with the canoe and take us across the stream;*" its component parts are as follow, the first syllable *nad*, is derived from the verb *naten* to fetch, the second *hol*, is from *amochol* a canoe; *ineen* is the verbal termination for us. The simple ideas therefore contained in this word, are, *fetch canoe us*; but in its usual and common acceptation means, *come and fetch us across the river with a canoe*. I need not say that this verb is conjugated through all its moods and tenses."

"The tree which we call the *Spanish oak*, remarkable for the largeness of its leaves, they call *Amanganaschquiminschi*; 'the tree which has the largest leaves shaped like a hand.' If I were to imitate the composition of this word in English, I would say *largehandleafnuttree*, and softening the sounds after the Indian manner, it would perhaps make *larjandliffentree*, or *larjandlennuttree*; or something like it. Of course in framing the word, an English ear should be consulted."

I have not sufficient knowledge of unwritten languages foreign to America, to say, whether the same peculiarities of contraction are used elsewhere, but I strongly suspect that they are characteristic of the savage state almost universally. Man seems naturally pleased with contracting words and expressions into small compass; and in unwritten languages, where there is no standard of correct speaking, this feature will predominate more and more continually. In America, where there was a continual adoption of individuals of different nations into their respective tribes, the effect would constantly be, that all simply auxiliary words would be overlooked and neglected by uninstructed speakers, who would use the essential words of the language for the most part alone, it not being a difficult matter to use them with all the intelligence their wants required. Such a practice would at least affect the more important words, so that a part of a word, or syllable, from its combination with other syllables, would convey the desired sense. I think this feature may be recognised in our own language, to a much greater degree than will at first be suspected, and however uncouth many of our phrases would look, were we to write them as

they are pronounced, yet any one would be considered singularly precise, who would speak them as they are written. I subjoin the following instances, to mark the disposition even among ourselves, to contract our words, which as spoken, are spelt nearly in the following manner. I'm lovd, yur lovd; he's lovd, I v'lovd, I l'lov, I d'lov, I ca'nt lov, I wo'nt lov, I sha'nt lov, &c.; with all other phrases in which our auxiliary verbs are used. Yet we recognise at once, in these sounds, the composition of the phrase, though some of its parts are reduced to single letters alone; and if a state of great debasement, and loss of letters was to take place with us, the facility of contraction, checked by the ear alone, would be greatly increased.

We have hitherto considered the syntactic construction of the American languages, throughout the continent, to be similar; but the time has now arrived in the progress of our investigation, to express some doubt as to this precise resemblance. Even at this early period of making such researches, features of difference have been made known, which must tend greatly to weaken so universal a theory.

Eliot, Edwards, Heckewelder, and Zeisberger, say, there is no substantive verb in the Delaware and Massachusetts Indian languages, and which we have also exhibited by our verbal paradigms.* But the author of the article in the N. A. Review, (*Jany.* 1826,) observes, the substantive verb, (*sum* of the Latin) is found both in the Miami and Sioux languages. And Baron Humboldt expressly says, it is found in the Chayma and Tamanack languages, of South America. (*Pers. Nar.* iii. 258.)

It is easy to perceive where this is the case, that the verbal forms must be very different from those used by nations who have no such verb.

The Spaniards have conjugated the Mexican and other languages, according to all the forms of the Latin verbs, even to the gerunds and supines, the correctness of which Mr. Du Ponceau doubts. But, if he be right in his conjecture, surely little or no authority can be given to such grammars, and if they be exact, there is the greatest difference between their formation of the verb, and what is represented to be the case with the more northern Indians.

The Cherokee language has a dual number, according to Mr. Pickering, (see *Eliot's Grammar*, xx,) and this peculiar-

* Dobrizoffer (*Hist. Abipones*, ii. 183) says, neither the Guaranies nor the Abipones of Paraguay, have a substantive verb; and he illustrates this by various examples.

ity distinguishes the Karalit, or language of the Esquimaux. (*Cyclopedia*, art. *Greenland*.)

With respect to minor differences, we are embarrassed with the conflicting statements given by different writers, which at any rate shew, that the subject is very imperfectly understood. Thus Eliot says, the Massachusetts Indians have only animate or inanimate nouns; and this is the case with the Delawares, according to Heckewelder. But Zeisberger remarks, their nouns are masculine, feminine, and neuter. In the Onondago language, there are, according to one grammar, only masculine and feminine nouns; and in another by the same author, (Zeisberger) there are masculine, feminine, and neuter nouns. (*New York Hist. Coll.* iii. 246.)

Mr. Du Ponceau observes, that notwithstanding Eliot's positive statement, that substantives are not distinguished by cases, except as above mentioned, we are surprised to find different terminations of the same word, in various parts of his translation of the Bible. See notes to Eliot's Gram. xiv.

The interrogative pronoun *who*, Eliot, Zeisberger, and Heckewelder, say, is used in the languages of the Massachusetts and Delaware Indians; yet the author of the Article in the N. A. Review, previously quoted, says "there is no word for *who*, in the whole range of the Indian languages, as far as we are acquainted with them, and there is certainly none in the Delaware."

The Rev. Mr. Edwards asserts, there is neither *who*, nor *which*, in the language of the Mohegans, who were one of the Massachusetts tribes.

From what has been generally brought forward upon the subject of the Indian languages, I think it will appear, that our knowledge of them is meagre and uncertain, but there seems enough known, to make us doubt very much, the high eulogiums that have been given to their syntactic construction. It appears to me, that the idea of their grammatical richness, has arisen, partly, from misapprehended views of the missionaries, who in testifying to the capacity of the Indians for moral instruction, have only asserted a sufficient richness in their languages, by which any kind of ideas might be brought within the sphere of their capacities, and partly, from the surprise of philosophers, in perceiving the perfection with which the Indians express their thoughts. The philologers, considering only the barbarism of their condition, did not expect to see abstract subjects so directly brought to their comprehension: and then perceiving the

mechanism by which the idea was expressed, have imagined a perfection of plan in the contrivance, that does not belong to the construction of any language, but is alone referrible to the intellectual powers of man, considered as a rational and intelligent being. Now, man is every where the same, as regards his capacities, and having the power of speech, he expresses all his hopes, enjoyments, and fears, by intelligible sounds or words; and these emotions of the head or the heart, though differing in intensity, are certainly the same in the savage, as in the civilized man. The progress of civilization makes nicety of distinction more necessary, and new words are continually made according to the genius of the people, to meet their intellectual wants. If, however, we compare a rude and barbarous language, with one both civilized and polished, there is a prodigious difference in the quantity of words. But if we reduce the words of the cultivated language, to heads, under a rigorous classification, I think it will be found, that the barbarous language has just as many heads or original words; and that the excess of words in the former language, are only the various degrees of expression, or differences of intensity, that have arisen from the restricted signification of the original words.

It has been justly observed by Humboldt, (*Pers. Nar.* iii. 269,) "that those languages, the principal tendency of which is inflection, excite less the curiosity than those which seem formed by aggregation.* In the first, the elements of

* Aggregation, or agglutination, are technical words in philological science, which distinguish one of the two different classes, into which all spoken language has been divided by Mr. F. Schlegel; a distinguished German philosopher whom we quote at second hand from Humboldt. (*Pers. Nar.* iii. 263.) Of these two classes, "one more perfect in its organization, more easy and rapid in its movements, indicates an interior development by *inflection*; while the other, more rude and less susceptible of improvement, presents only a crude assemblage of small forms or *agglutinated particles*, each preserving the physiognomy which is peculiar to itself, when it is separately employed."

Of these classes, the Sanscrit, Greek, Latin, German, &c., belong to the first. The Indian languages of America, the Coptic or ancient Epyptian, and to a certain degree, the Hebrew, Arabic, Biscayan, &c. belong to the second.

We think the theory entitled to little consideration; believing with many grammarians, that the terminations of words according to inflection, were originally personal pronouns, or particles, which have gradually become blended with the radical. I presume, Humboldt was of this opinion; for he supports this view by the following note. "Even in the Sanscrit, several *tenses* are formed by aggregation; for example, in the first future, the substantive verb *to be*, is added to the radical. In a similar manner, we find in the Greek *mach-eso*, if the *s* be not the effect of inflection, and in Latin *pot-ero*, (Bopp, p. 26 and 66.) These are examples of incorporations and agglutinations in the grammatical system of languages, which are justly cited as models of an interior development by inflection. In the grammati-

which words are composed, and which are generally reduced to a few letters, are no longer distinguished. These elements, when isolated, exhibit no meaning; the whole is assimilated and mingled together. The American languages, on the contrary, are like complicated machines, the wheels of which are exposed. The artifice is visible; I mean the industrious mechanism of their construction."

It now only remains for us to ascertain, whether there be any thing peculiar to the American Indians, in the grammatical construction of their language, which remarkably distinguishes them from other nations of the eastern continent.

When we consider the very imperfect manner in which vocabularies have been made, both among the American Indians, and the rude nations of Asia and Africa, and the still less attention that has been paid to their grammatical forms, I cannot believe, that the American languages are thus insulated in their structure, as the writings of the philologists seem to indicate. The love of system has undoubtedly much prevailed, in making such a distinction in the classification of languages; for there is an evident disregard to numerous or extensive analogies, that do exist between the construction of the American, and other languages, in various parts of the earth, which we beg leave to point out, at least to a certain extent. It is admitted by philologists, that the language of the Tschuktshi of Asia, that of Biscay in Spain, and of Congo in Africa, bear striking resemblances to our Indian forms of speech; we do not say in every particular, but in their general features there are evident marks of conformity of structure.

Nor is this resemblance confined to Congo alone, among the African languages. Mr. Du Ponceau (*Hist. and Lit. Trans.* xlv.) says, there is great reason to believe, that the same grammatical construction extends to all the black nations, that inhabit that coast.

The language of the Grusians, a nation of Asia, appears to bear a striking resemblance in some of the forms of its verbs, to those of the American Indians. (*Hist. and Lit. Trans.* xlii.)

The resemblance in the structure of the Indian languages, and that of the Hebrew, is so great, as to have misled many

cal system of the Americans, for example in the Tamanach, *tareschi*, I will carry, is equally compounded of the radical *ar*, (infin; *jareri*, to carry,) and of the verb substantive *eeschi*, (infin, *noschiri*, to be.) There hardly exists in the American languages a triple mode of aggregation, of which we cannot find a similar and analogous example, in some other language, that is supposed to develop itself only by inflection." (*Pers. Nar.* iii. 264.)

persons speculating on the origin of the Indians, as to assign them a Jewish descent. But rejecting this silly notion, the syntactic construction of these languages is similar, and the analogies are widely extended by this means, to the Chaldeac, or Assyrian, the Phœnecian, and other cognate languages. As these last, are connected in a greater or less degree, with those of all the surrounding nations, it seems impossible to say, where we shall assign the limits to a less particular resemblance.*

Under these circumstances, therefore, I cannot admit without greater proof, that the forms of grammar among the American Indians, are peculiar to them alone. On the contrary, they appear to bear evident marks of similar construction, with those of various other nations, testifying a common origin with them, and to communications which perhaps remount to the earliest history of our race, when in all likelihood, every language decidedly belonged to the agglutinated form: for it appears most probable, that inflections by terminations, are in reality only parts of the personal pronouns, or auxiliary words, that have been gradually and insensibly blended to the various parts of speech, subject to declensions or conjugations.†

But whatever diversities of formation exist among the ancient or the modern languages of the two continents, on first inspection, it will be soon found, that their analogies to each other become more and more apparent, the longer we continue our investigations; and at last, we become entirely satisfied, that they have proceeded from one original and common source. I think the labours of the philologists on this subject, leave us no room for doubt. The American languages do not shew so pointed a resemblance to those of the

* In languages, as in every thing in nature that is organized, nothing is entirely isolated or unlike. The farther we penetrate into their internal structure, the more do contrasts and decided characters disappear. It might be said, that they are like clouds, the outlines of which do not appear well defined, except when they are viewed from a distance." (*Humboldt, Pers. Nar.* iii. 264.)

† Mr. Jones in his Greek grammar, has shewn that the personal terminations of the Greek verbs, are but corruptions of the personal pronouns, and all the variations of mood, tense, number, and persons, have originated in these six elementary principles: thus

ἐγώ	ὦ	I.	ἡμεῖς	ὅμην	we.
σὺ	εἰς	thou.	ὕμεῖς	ἐτε	ye.
ὅς	εἰ	he.	οὗτοι	οὗσι	they.

See Rees's Cyclopaedia; art. Language. It may convey some idea of the difficulties, I have had to encounter in my researches, by stating, that I have been unable to find a copy of Jones' Greek Grammar, in this city of 70,000 inhabitants.

eastern continent, as these latter do among themselves, and this may be explained by several considerations. In the first place, the vocabularies of the American languages are extremely defective, and do not permit extensive or accurate comparisons, and in the second place, the Indians have had no intercourse with other nations, as far as we know, since the earliest ages of the world. Being thus secluded from foreign nations, and their state of society remarkably favorable for the multiplication of dialects, it may be readily supposed, that traces of origin remounting to a very remote antiquity, will be comparatively slight. Yet amid all these causes of obscurity, enough has been brought forward in various philological researches, to shew, that they have a common descent with all other post diluvian nations;* which I presume, is the most that can be ever shewn by philology, for no investigation, hitherto, has given us the least reason, to consider them particularly connected with any one, two, or three individual languages, of the eastern continent.

To this chapter we shall append a few insulated facts, relating to the general subject, which can only be considered of consequence, from thus bringing under one view, every circumstance we are acquainted with, respecting the peculiarities of Indian communication.

The Caribs, have in a manner two languages common to them; one of which is spoken by men, and the other by women. This curious anomaly prevails also among the Guaycurus, Mbayas, Abipones, and other South American tribes. (*Southey's Brazil* iii. 399, 672—*Azara* ii. 106.) Among the Natchez of Louisiana, the nobility spoke a language partially different from that of the common people. (*Du Pratz's Louisiana*, ii. 170.)

Humboldt, (*Pers. Nar.* vi. 20.) explains these singular circumstances very satisfactorily, by the supposition, that it arises from the well known practice of many Indian nations, preserving women captured in war, while the men were put to death. The consequence of which practice would be,

* The late Dr. E. D. Clark, (*Trav. in Scandinavia*, ix. 391,) states in a note, that the Moravian missionaries say, a Laplander may be employed as an interpreter with the Esquimaux. I should have thought he intended to say a Greenlander, might be thus employed. But in vol. x, 26, he says again, "There seems good reason for believing that the language of the Laplanders, exists under different modifications over the N. W. parts of Russia, Finland, Lapland, Greenland, and the coast of Hudson's bay and Labrador, inhabited by the people called Esquimaux."

If this statement be correct, but which I have no means of determining, it will entirely destroy the idea that the grammar of the American Indians, is in any way peculiar to them.

where frequent wars prevailed with an adjacent people, that the women on being adopted into the nation, would speak their ancient language, and impart it to their children, whereas the national pride of the men, would not permit boys or young men, to use the language of a conquered foe; and thus two languages have been established among these people.*

In some of the North American languages there were certain words used by men, and others by women, for the same things, and these it was considered improper to be used by the different sexes indiscriminately.

Acosta relates, "there are some in Mexico that understood each other by whistling, which is ordinarily used among lovers and thieves; a speech truly wonderful which none of our men could come to the knowledge thereof." (*Purchas. Pilgrims*, iii. 1135.)

For some purposes, the Guaycurus of Brazil can communicate by whistling, as well as by words. (*Southey's Brazil*, iii. 672.)

I presume, this whistling speech, as Acosta styles it, was nothing more than some few signals, which were only intelligible to the parties interested, and who had previously agreed to their signification.

The Indians in various parts of North America, could understand each other to a surprising degree, by means of signs, which appear very artificially arranged. Mr. Ellicott in descending the Ohio river (*Journal*, p. 30.) met with a certain Philip Nolan, "who, while in our camp, observed a number of Indians who were from the western side of the Mississippi, he spoke to them in the several languages with which he was acquainted, but they could not understand him; he then addressed them by signs, to which they immediately replied, and conversed for some time with apparent ease and satisfaction. Mr. Nolan informed me, that this curious mean of intercourse, was used by many nations on the west side of the Mississippi."

A description of the principal signs, in use among these Indians, has been published in the *Trans. Amer. Philos. Soc.* vi. p. 1.

* Malte Brun (*Geog. book*, 25,) says, the Circasian princes and nobility speak a language peculiar to themselves, which is unintelligible to the common people. This we presume is occasioned by causes more or less analogous to those among the Caraihs. In like manner the Spaniards of Paraguay speak a language, compounded of the Spanish and Guarani; the first of which is there only understood by the higher classes. (*Southey Hist. Brazil*, iii. 431.) In Quito, Ulloa observed a similar state of things, though not to so great an extent.

Bossu (*Travels*, 338,) says, the Attacapas Indians near the Bay of St. Bernard, can speak by signs, and hold long pantomime conversations.

Heckewelder says, the Indians generally, have a language of signs, and can understand each other in this way, when they are unable to comprehend each other's speech.

Lewis and Clark (*Exped.* i. 445,) observed, that the Indians west of the Rocky mountains, communicated with each other by the universal language of signs and gesticulations.

Charlevoix, (*Hist. Paraguay*, ii. 389,) shews us the same system exists at the southern extremity of America; for he says, the Indians of the Pampas, and the natives of Patagonia "use a language of signs."

CHAPTER III.

A VIEW OF THE SOCIAL AND MORAL INSTITUTIONS OF THE INDIANS OF AMERICA.

A CHARACTERISTIC view of the Indians of America, founded upon an extensive examination of their social and moral institutions, is fully as interesting as any research upon their physical conformation, or structure of their languages; and must be from evident reason, a principal mean for investigating their origin. If they have descended from any nation of ancient or modern times, they must in a greater or less degree, continue to resemble the nation, or nations, from whom they have sprung; unless indeed, the era of their origin belongs to those remote ages, in which the history of all nations lies involved in a common obscurity.

The plan upon which we shall proceed in this part of our researches, will be; first, to give a correct view of the American Indians in their moral and social state; and secondly, to produce analogous matters from the history of various nations of the eastern continent, as far as may be deemed necessary.

In attempting to describe the manners and institutions of the Indians, we shall not adopt those loose and general descriptions, that have been hitherto published on this subject. But we will endeavour, as far as we are able, to convey a correct idea of what they really were; which will necessarily require more or less detail, of whatever was peculiar to their aboriginal condition.

What would any one think of a view of European or Anglo-American society, which would be so general, as not to detail the leading features of their government and religion, the tremendous machinery of their wars, or the importance and variety of their mechanical arts? Who could appreciate the state of their social institutions, unless a certain degree of information was given upon these subjects. Yet thus general, have been for the most part, the views given of the Aborigines of America. Little or nothing has been detailed, and of that little, we frequently find, that insignificant matters have been made important, and local customs have been assumed as pertaining to the whole continent: Or else, the

subject has been treated in that oratorical and declamatory manner, that though we may be pleased with the eloquence of the narration, we receive no correct ideas of what the Indians really were; or in what respects they resemble, or in what they differ, from the other branches of the human family.

We do not propose giving a detailed account of every thing belonging to the Indian life; for it would not only be tedious, but unnecessary, when not furnishing matter characteristic of their social state. But while we avoid puerile and impertinent details, nothing should be wanting to give the general character of the people, upon whom we are writing. With that of the American Indians we believe most readers are already familiar, from the general descriptions given by different travellers. Nevertheless, it may not be amiss to observe in these prefatory remarks; that the savage or hunter state of society, being the simplest in its nature, and having the fewest wants, necessarily produces great uniformity of character, in every part of the world. To provide sufficient food, raiment, and shelter, are undoubtedly the chief, if not the only consideration of savage existence; and in pursuit of these objects, life itself is spent. Intellectual or moral considerations are seldom called into action, and when excited are of the grossest kind. The weakness of human nature inclines them to bear the yoke of superstition; and a natural resentment of injury, or the stimulus of pride, excites them to war. At such times, the social principle is called into action, and prevents the national ties from being completely broken. To this feeble sense of mutual dependence, must be attributed their ideas of law and government; in which by a tacit acquiescence, the most elderly or experienced men of the tribe acquire a certain political character, resembling the legislative department of regular governments; the other corresponding parts of which, are scarcely discernible. Such, in brief, was the general state of society in America, prior to its discovery by Columbus, and such may readily be acknowledged, is the general state of all savage nations, wherever they may be found. The illustration of this fact, for general readers, offers little instruction or amusement, but to the antiquarian or philosopher, certain details even on these subjects are necessary, in elucidating their particular researches on the natural or moral history of man.

Without entering, therefore, into uninteresting details of habits and manners, universal among all savages, and which

depend upon the necessities of human life; our chief object will be: to give not only a correct picture in more general terms, but to exhibit in stronger lights, those particular customs or usages, that may be considered as giving character to the piece; and which indeed constitute the points, upon which affinity to other nations may be proved, or affiliation be denied.

With respect to the analogies to be brought forward from the history of other nations foreign to America, and which may be supposed in a greater or less degree, to resemble those of our Indians; we propose introducing them in that manner, which will be least tedious and impertinent. Upon those features of resemblance which characterize human nature, nothing need be said. But upon those that are artificial, or more or less abstract in their nature, it becomes interesting to see the resemblances such as they are, that exist between people so widely separated from each other, whether we consider such things to have arisen from a natural sense of expediency or policy, or whether we regard them, as proving an ancient descent, from the common progenitors of the human race.

It has become rather common of late, to undervalue comparisons of nations with nations, according to their habits and manners; not simply, because writers have been injudicious in their analogical researches, and in the theories, they may have deduced from such resemblances, but also from the circumstance, that the generality of readers, consider the customs, manners, and institutions of nations, to be of a changeable and varying character; frequently assuming new and often very different aspects. Though we do not pretend to say that this is not partly true, we consider it very incorrect as a general assertion; and with some confidence appeal to all persons accustomed to antiquarian researches, whether there be much of important difference in the habits, manners, and institutions of nations, during the periods of many revolving ages. Among highly civilized nations, matters of taste and fashion, are perpetually modified or changed; the first principles however are little affected, and even the practice or fashion, after a departure of many years, again treads in the steps, and assumes the guise, that characterized the days of our grandfathers, or their progenitors. But matters of a grave or sober kind do not thus change; they pass along the stream of time unaltered; generation after generation possess them, and hand them down to a posterity, who identifying them with their own personal feelings, are ignorant of the antiqui-

ty of habits, manners, customs, and superstitions, that remount to the first origin of our race.

How much of astronomy in use among us, is of the most ancient discovery? In the sublime language of Bailly, "if we look at the heavens, ancient history is there written, ancient fable is there portrayed, the very gods of antiquity still maintain their empire there." What history commemorates the first division of the heavens into constellations, under those appellations by which we, and the most ancient nations of the earth have known them? Who first propagated the doctrine of the "skyey influences," which after having passed through the hands of Chaldeans, Magi, and Brachmans, are yet stamped on our almanacks, for the superstitious guidance of our common people?*

The names of our days, have continued long since the gods to whom they were consecrated have been abandoned, but the Sun's day, the Moon's day, and Thor's day, &c. yet shew forth the superstitions of our ancient pagan forefathers of Germanic blood; while our months, retain the names given them by the ancient Etruscans, or more modern Romans.

How many pagan superstitions have been preserved in the bosom of our christian churches, where we should least expect to find them. Yet the priest performs his duties in the dress of a Roman gentleman.† The almost sacrilegious antiquarian, shews, that the ancient fires of Baal, are now kindled to the honor of St. John.‡ The cakes, that the prophet Jeremiah mourned to see made for the queen of heaven, are now made to honor St. Bridget:§ and the suppositious frankincense of Horace, that melted without fire, now liquifies to honor saint Januarius. Ceres, under the name of the Harvest Queen,|| is yet drawn in procession by christian hands in the rural parts of England; the dance in honor of Priapus, is yet performed unsuspectingly around the May pole,¶ the semi-annual revellings of our Scandinavian or German ancestors, are yet continued under the modern names of Christmas, and Easter; and the fooleries of the Saturnalia and Lu-

* It is not without some indignation, that I mention an Almanack printed A. D. 1829, for the use of the Farmers of Pennsylvania and Maryland; containing the days of the year, arranged according to the old style! that this inflexible class of men, may plant and sow, on the same days as their great grandfathers had done.

† Transl. Roman Missal, by Bishop England, xvi.

‡ Collectanea Reb. Hibern. ii. 64. 65.

§ Ibid. 290.

|| Clark's Travels in Egypt, Syria, &c. ii. 139.

¶ Maurice Ind. Antiq. vi. 87. 94.

percalia, are yet repeated on *twelfth-day*, and on the festival of St. Valentine.*

The misletoe, is still in various parts of England, hung up in houses on Christmas eve; and fortunes divined by burning its leaves on twelfth night,† the very time the Druids anciently collected this plant. The superstitious natives of the Hebrides, and other parts of Great Britain, still walk from left to right around their druidical cairns, as their forefathers did long before the days of Cæsar and Agricola.

If we turn to law and politics, we find some of their most important features, involved in the earliest history of the German barbarians; and the Roman law, yet forms the basis of legal proceeding over the principal part of Europe.

Travellers in our day in the East, shew, that nearly the same habits, manners, and customs, yet exist in those countries where Abraham or Ishmael lived, or where Cyrus reigned; and the explanatory notes of our Bible, abound with extracts from recent travellers, explaining even modes of salutation, and terms of speech, made use of in the days of the patriarchs. Well may we say, as was said three thousand years ago by Solomon, "is there any thing whereof it may be said, see, this is new: it hath been already of old time, which was before us."

Without going further into these details of matters foreign to our work, we presume the reader is satisfied, that after making all allowances for modern improvements and changes, it will still be found, that a surprising number of usages, customs, and superstitions, of the earliest ages of the world, are in use among us at this very time, and are yet in fashion.

If such be the case among civilized nations, who change the most; should we not consider the usages and superstitions of ruder people, more permanent, and equally ancient? They are in fact incorporated into the very existence of their societies, nor can we see, how changes of any importance, could arise among them.

It is proper to observe, that in bringing forward customs and manners of other nations, analogous to those of the American Indians, we are not to be considered as having any other view in so doing, than to discover a general truth. We leave it to the reader to determine, whether such things are to be consider-

* Hone's Every Day Book, ii. 58, 222. To what an extent St. Valentine's day is observed in London, may be estimated by the statement of this author, who relates, "two hundred thousand letters beyond the usual daily average, pass through the two-penny post offices in London on this day."

† Mallet's North. Antiq. ii. note 146.

ed as analogies, or mere resemblances only. We think we shall do right, to remark them as they occur; and in thus collecting analogies from all nations, whose histories or descriptions are within our reach, this good will result, that we shall be enabled to judge more correctly, as to the exactness of any resemblance of our Indians, to any nation of the eastern continent. And if we are unable to shew their particular origin, much is gained even by the negative proof of shewing what they are not.

Proceeding then upon the assumption, that the Indian tribes of America throughout its extent, bore a general resemblance to one another in the state of their societies, and with few exceptions; we shall for our convenience, divide their social history into two unequal divisions, one relating to the savage or barbarous tribes, and the other concerning those whom we may call demi-civilized.

The savage proportion of the two Americas is very great, for it embraces nearly the whole continent. Those whom we consider half civilized, were only the Natchez and Floridians, of the United States; the Mexicans, the Peruvians, and the Muyscas, a mountain people of Colombia. All other parts of America were in the possession of barbarous nations, differing little from each other, except as climate, or a peculiar topography, varied the general resemblance.

We shall notice whatever is thought worthy of observation among the savage tribes, under the following heads. Their habits, manufactures, government, laws, religion, and wars.

Of the demi-civilized tribes, more particular descriptions will be given, and we shall treat of each in separate chapters.

On the Habitations of the Barbarous American Tribes.

The greater part of the savage American tribes, can scarcely be said to have had any fixed residence; for, from their great improvidence, they were continually obliged to remove to those districts or shores, which fish, or other animals, guided by their instincts, selected for pasture, or the purpose of spawning. Hence at one time, the Indians are found along the shores of seas and rivers, in search of fish or testaceous animals; and at another season, they are pursuing deer, buffaloe, and other quadrupeds, into the forests and mountains; without local attachment to any particular soil or shore, though circumscribed by what were considered the bounda-

ries of the national territory.* Some tribes, under a warm and genial sky, were less erratic, because a liberal soil producing either spontaneously, or with the least degree of cultivation, a variety of fruits or roots, the calls on their enterprise and activity were less frequent, and that sloth, so grateful to all savages, was more abundantly indulged.

The greater or less difficulty they find in procuring subsistence, therefore modifies essentially their habits, and when not absolutely controlled by climate, these circumstances determine the character of their dwellings, whether they are to be of the slightest materials, or of more durable construction. The more fixed they are to one locality, the more commodious are their houses, and the greater is their attention to agriculture, and the mechanic arts.

Generally speaking, the houses of the savage tribes, were built by first fixing a number of saplins in the earth around a space of sufficient size, and bending their tops over to the opposite sides, where they were tied together; as is done in constructing our summer arbours. This frame was then covered over with pieces of bark or coarse mats, sometimes plastered with clay, and with repeated coverings was made sufficiently tight and warm. In the centre of the roof, a hole was made to let out the smoke of the fire, which was kindled in the middle of the floor. An aperture was left in the side of the hut for a door, which was occasionally closed by a mat or large skin; though, as they left no opening as a window, the door answered a two-fold purpose in this particular.

A village, consisted of a greater or less number of such buildings, collected together in a loose disorderly manner; and is thus described with great accuracy by Charlevoix. (*Travels in Canada*, 240.) "Imagine you see a heap of cabins without order or being set on a line, some like cart houses, others like tunnels, built of bark, supported by posts, sometimes plastered on the outside with mud in a coarse manner; in a word built with less art, neatness and solidity, than the cabins of the beavers."

Some tribes used tents, made by erecting a number of long poles tied together at one end, and then opening or separating the lower ends over a circular space of ground. Upon these poles they fastened mats or skins sewed together as a covering, leaving openings for the escape of smoke, and for

* Thus it happens, says Charlevoix, when speaking of the Sioux, "that a village which was last year on the east side of the Mississippi, shall next year be on the west side, and that those who were at one time by the river St. Peters, are perhaps now far enough from it in some meadow."

the entrance as observed above in the construction of the huts. These tents were chiefly used among the North American tribes, and especially west of the Mississippi. The Mbayas and Guaycurus of Brazil, (*Southey's Braz.* iii. 386, 664.) also used tents covered with coarse mats.

In the tropical and warmer parts of the continent, their huts were made after a similar fashion to those just described, though with little attention to any comfort but protection from rain.

In the more inclement regions of the north, some tribes, as those of Oonelaska, &c. lived during the winter in caves under ground, and in the summer, in various temporary lodges. The Esquimaux built themselves vaulted habitations from frozen snow, cut into large parallelpipeds, which were laid in a regular manner like mason work, each layer projecting a little inward of the previous layer, until the whole terminated in a regular vault. In the summer time they lived in tents. Venegas (*Hist. Californ.* i. 77) says, some of the Californian Indians in the winter time, lived in caves made in the sides of the mountains.

The only South American tribes that lived in caves, according to my knowledge, were the Machicuys and the Nalicuegas of Paraguay, who are noticed for this peculiarity by *Azara*, ii. 77. 155.

In certain parts of South America, where the country was liable to extensive inundations, many tribes fixed their habitations on trees, above the usual height of the overflowing waters. Columbus described certain Indians living in this manner on the coast of Veragua, the reason of which he was unable to conjecture. The mouths of the Orinoco are also thus inhabited according to Gumilla, (*Hist. Orin.* i. 226.) and Balboa on the shores of the Isthmus of Darien, observed the same thing. (*Herrera*, ii. 20.)

Such in general, were the habitations and modes of living, among the more wandering and unsettled tribes. But there were others who lived in situations either where subsistence was more easily procured, or who derived a greater proportion of their food from agriculture. Such tribes had even comfortable habitations, framed of good substantial materials. This may be considered generally the case, with those who lived chiefly on fish and other aquatic productions. The reader of Mackenzie's Voyages, or Lewis and Clark's Travels, cannot but be struck with this fact, for after describing the rude houses or tents of the Indians between the Atlantic ocean and the Rocky mountains, we find them on descend-

ing the waters flowing from their western slopes, frequently expressing surprise at the superior construction, and commodiousness of the houses of those tribes, who feed chiefly on salmon and other fish. Lewis and Clark have described some of those dwellings of very considerable dimensions, in which several families resided. Near the mouth of the Multnomah river, they speak of one, two hundred and twenty-six feet long; entirely above ground, under one roof, and divided into seven apartments, each thirty feet square. (*Lewis and Clark* ii. 220. 237.) In another instance, they observed one of one hundred and sixty feet long, by forty in breadth.

The art of the carpenter seems to have been in these parts of the north west coast, in much greater perfection than any where else in the savage districts of America. The travellers above mentioned, speak of wooden temples, and contrivances to catch fish, that must have been framed with great labour and exertion; and they, as well as navigators along these sea coasts, describe the natives as making with their rude tools of stone or bone, plank for houses and other purposes. Capt. Portlock speaks of plank, made by the natives of Portlock harbour, with their "shocking tools," ten feet long, two and a half broad, and not more than one inch thick. In another part of his voyage, he speaks of plank, twenty or twenty-five feet in length, made in the same manner. (*Portlock's Voy.* 253. 292.)

Capt. Cook says, the houses at Nootka Sound, (*Voy. N. H.* ii. 314,) are built of very long and broad plank.

Marchand speaks with surprise, of the architecture of these people, and gives us accounts that are really extraordinary. He observes, (*Voy.* i. 500,) "We found houses with two stories, (one however is under ground,) fifty feet in length, thirty-five in breadth, and twelve or fifteen in height; each habitation with a portal, that occupies the whole elevation of the fore front, surmounted with wooden statues, erect, and ornamented on its jambs, with carved figures of birds, fishes, and other animals." (*See also Vol.* i. 402, 404, 418, &c.)

Some of the houses at Nootka Sound, are very remarkable from the enormous size of the materials used in their construction. The following extract from Vancouver, (*Voy.* iii. 310,) is not only interesting in its description, but will be a matter of future reference from another part of our work.

"On the house of Maquinna, (at Nootka,) were three immense spars; the middle piece was the largest, and measured

at the but end nearly five feet in diameter; this extended the whole length of the habitation, which was about one hundred feet long. It was placed on wooden pillars. That which supported it within the upper end of the house, was about fifteen feet in circumference. One or more houses in many of the deserted villages, as well as in most of the inhabited ones we had visited, were thus distinguished."

Mears (*Voy.* i. 223,) is less explicit in his description, but says, that some of the rafters of houses on this coast, would render the mast of a first rate ship diminutive.

Except in the particulars we have enumerated, there does not appear to be any thing which distinguishes the natives of this coast, from their savage brethren east of the Rocky mountains; though in such works, they surpass all other tribes in North America; excepting the Natchez, and Mexicans, who were demicivilized people; and of whom we shall treat in subsequent chapters.

In South America, we again meet with more sedentary savage tribes, who lived in houses of great extent, containing a number of families under one common roof.

On the coast of Venezuela, (*Herrera*, i. 216,) the natives built houses that contained above one hundred and fifty persons.

The Tupinambas of Brazil, (*Southey, Hist. Braz.* i. 185,) lived in houses one hundred and fifty feet in length, by fourteen in breadth, and twelve feet high, well thatched with palm leaves. Six or seven such houses constituted a town, and were built so as to enclose an area for general use and convenience.

Purchas (*Pilgrims*, iv. 1226,) says, some of these houses were two hundred yards in length.

The Guaycurus of Paraguay, (*Southey, Braz.* i. 121,) had similar habitations, capable of holding several hundred people.

Certain nations foreign to America, lived in houses equally extensive with those just noticed. At Easter island, La Peyrouse, (*Voyages*, iii. 194,) describes one, in the shape of a canoe turned bottom up, which measured three hundred and ten feet in length, by ten feet in breadth, and ten high in the middle, but tapering to the ends to three or four feet.

At Otaheite, were houses two hundred feet in length, and thirty broad, and at Savu, near Timor, were some, four hundred feet in length. (*Hawksworth, Voy.* ii. 213, iii. 312.)

The inhabitants of the Garrow Hills, (*As. Res.* iii. 18, 23,) have some houses that measure one hundred and fifty feet long by forty broad.

These instances are altogether referrible to that state of society, which either for purposes of security, or from the comparative ease with which subsistence is procured, has fixed the inhabitants to a particular soil, the consequences of which may be appreciated in a variety of other matters also depending upon sedentary habits, of which the most important perhaps is agriculture.

Of the Agriculture and Subsistence of the Barbarous Indians of America.

The Indians of North America, consumed but an uncertain proportion of food derived from agricultural labour. They added, it is true, to the various kinds of animal food, which may be considered their chief support, fruits, berries, nuts and roots of spontaneous growth; but the vegetable substances raised by their own industry, constituted but a small part of their subsistence. In making these remarks, however, it must be understood, that we are speaking of the more barbarous tribes; for those Indians who lived under a more regular form of government, constituting a half civilized state of society, it would seem, lived chiefly upon vegetables. But these particulars we shall notice under the different chapters, that treat of such people. The savages of South America were much more agricultural in their habits, than those of the North.

The nature of their diet, was much influenced by climate; for whilst the northern Indians sometimes eat the inner bark of certain pine trees, and that moss, (tripe of the rock,) which necessity alone has termed edible, those of the south lived on cocoa nuts, plantains, bananas, and other fruits, which nature spontaneously produced in regular succession. We do not purpose, however, to enumerate the indigenous fruits or roots of the continent, any further than as they were raised, and cultivated, by the Indians for their subsistence.

The plant most extensively cultivated, was the Indian corn, (*Zea mays*,) which was raised universally throughout America, from the borders of the Arctic regions of the north, to Patagonia in the south.

The next plant, in point of extensive cultivation, was the mandioc, yucca, or cassava.* (*Jatropha*, of several species.)

* Cassava properly means the *bread* made of the mandioc root, though it is now used as a synonyme.

Tapioca is a preparation from this root, which has been derived, as well as its name, from the savages of Brazil.

This root was for the most part, first grated or scraped into a pulp, from which the juice was carefully expressed, and then baked into bread. As this root is poisonous without such a preparation, it is a curious matter, to comprehend how its use has prevailed to such a considerable degree among so many rude tribes.

The cultivation of the cassava, prevailed in Paraguay, Brazil, Cumana, and the West India islands; in fine, in all that immense country east of the Andes, to the shores of the Atlantic ocean. It scarcely appears to have been raised in the mountainous parts of the now republic of Colombia, nor in Mexico, though the sweet species, according to Clavigero, grew in this last kingdom, where it was eaten after being simply boiled, it not being poisonous. But it does not appear to me, that the Mexicans cultivated it, nor any other people to the northward of them, though Herrera, v. 284, and Venegas, i. 44, describe it as used for food in California, under its name *yucca*, and Jefferson inserts it in his list of plants indigenous to Virginia.

The inhabitants of the West India islands, who undoubtedly were descendants of the Arrowacks and Caraibs of Guayana, and Brazil, carried this plant and the manner of preparing it for bread, throughout all those islands.

Nothing but great inattention could have referred the introduction of the cassava, to the importation of negroes from Africa. Peter Martyr describes it as being cultivated in Hayti, when Columbus first discovered that island, and Cabral observed it in Brazil, when he first landed on that coast, in A. D. 1500. Pigafetta, and all the earlier travelers, describe it as being extensively cultivated in Brazil, Paraguay, &c.

The Indians of both North and South America, cultivated also several different kinds of beans and peas, and several species of cucurbita, such as pumpkins, squashes, cymilins, water-mellons, &c. The sun flower, (*Helianthus*), was also partially cultivated for its seed, which were eaten after being parched, and beat into a meal between two stones. As far north as Maryland, they raised the sweet potato. (*Convolvulus batatus*.)

Columbus found pumpkins, beans, sweet potatoes, and yams, (*Dioscorea*), in the West India islands. They were also cultivated in Mexico, and in various parts of South America, though it is perhaps impossible to assign their limits.

In Mexico, the natives cultivated other plants and roots of a circumscribed use, which will be noticed generally, when treating of that people. They also raised certain vegetable condiments, as peppers, (capsicum,) tomatoes, (solanum,) &c.; which mark the superiority of their social condition.

In the mountains of New Grenada, now the republic of Colombia, in Peru, and Chili, certain tribes cultivated the quinoa, a species of chenopodium, which is denominated by the older travellers in those countries, rice, or Peruvian rice.

The common potato, (solanum tuberosum,) was cultivated, according to Humboldt, (*Pol. Essay*, ii. 345,) at the time of the discovery, in New Grenada, Quito, Peru and Chili; on all the Cordillera of the Andes, from the 40° of south to the 5° north latitude.* It seems certain, that it was not known in Mexico, before the conquest of Cortez.

In Chili according to Molina, (*Hist. Chili*, i. 90,) two species of grain were cultivated by the natives, under the names of magu and tucca. (Herrera, v. 73, says teca,) from which bread was made. One of these plants according to him, was a species of rye, and the other of barley.

* Though it is a common tradition, that potatoes were indigenous in Virginia, or rather North Carolina, and that Sir Walter Raleigh carried them from thence to England, the opinion most prevalent among the learned is, that Sir Walter, received them from South America in the first instance. The roots called *openauk*, which are described by Herriot, (*Hackluyt*, iii. 273,) agree however in description with potatoes; for he says, "they are a kind of roots of round form, some of the bigness of walnuts, some far greater, which are found in moist and marshy grounds, growing many together one by another in ropes, as though they were fastened by a string." But from various other descriptions given by travellers in other parts, it seems to me that some plant with tuberous roots, other than potatoes, may be meant. Thus in Purchas, (*Pilgrims*, iv. 1651,) it is said, that at Elizabeths islands, (near Nantucket,) "there are great store of ground nuts, forty together on a string, some of them as big as hens eggs, they grow not two inches under ground, the which nuts we found to be as good as potatoes." Now, in this last description the resemblance to potatoes, is as striking as that of the *openauk*, and yet they were not potatoes, for they are compared to them. Kalm, (*Travels*, i. 385,) also says, the roots of the *hopnis* or *hapis*, (*Glycene*,) resemble potatoes, and were boiled by the Indians for food.

We have been once or twice nearly misled, by the vague descriptions of some modern travellers in their mention of certain plants, as to suppose the potato (solanum,) indigenous to North America. Adair relates that "a sort of wild potato grows plentifully in the low lands from South Carolina to the Mississippi." But as the *Solanum* has not been observed by any botanist in those regions, and as Romans, (*Hist. Florida*, 84,) says "a species of *convolvulus*, with a tuberous root, is found in the low cane grounds of Florida," I presume it to be the potato of Adair.

Lewis and Clark, (*Exped. Rocky Mountains*, i. 24,) also mention "a kind of wild potato," growing on the banks of the Missouri river. This we consider was the *Psoralea esculenta*, (of Nuttall,) which is frequently mentioned in the narrative of Long's Expedition to the Rocky mountains.

The plantain, and various other fruits, were no doubt occasionally planted by the barbarous tribes; but generally speaking, they appear to have paid very little attention to their cultivation. The Mexicans, in addition to such fruits, raised also the cocoa, (*Theobroma*) pimento, (*Myrtus*,) &c.

Tobacco, (*Nicotiana*) probably of several different kinds, as well as some other narcotic plants, were raised from Canada to Patagonia, for the purposes of smoking or snuffing. In the W. India islands, Mexico, and all over South America, cotton was cultivated as a material for the manufacture of clothing.

The Chippeways, and other northern Indians, manufactured in large quantities, sugar or syrup from the sugar maple, (*Acer Sacharinum*,) as it grew in the forests.

Some of the more northern Indians, who had not the sugar maple, made a kind of coarse sugar from the birch tree; (*Dobb's Hudson Bay*, 42.) which they used with their meat. In Mexico, sugar was manufactured from the maize stalks.

In this section, we shall also introduce, the few observations we have to make upon the subject of animal food, for as the Indians eat flesh, fish, fowl, and insects, it would be unnecessary to more than mention the anomalies of their diet. Throughout all North America, excepting the Natchez and Mexicans, I believe there were but few instances of the Indians domesticating animals for food. In the West India islands, Columbus found parrots, ducks, and the *alco*, an animal something resembling a dog, domesticated by the natives. (*Pink. Am. Voy.* ii. 93; *Edward's W. Indies*, i. 95; *Humboldt's Pers. Nar.* v. 162.)

The natives of Paraguay and Brazil, partially domesticated ducks, parrots, and monkeys, for food. (*Southey's Brazil*, i. 107. 127, &c.

The Brazilian tribes, also, were very generally cannibals, and it was one of the most inveterate practices the missionaries had to overcome. Azara undertakes to deny this, but nothing is more clear by the narration of all the earlier travellers. It is not unreasonable to suppose, that the habit of eating monkeys, which was general among them, tended to render this practice less abhorrent.

Cannibalism cannot be charged to any Indians of America but those living in the countries watered by the Orinoco and Amazon rivers, or to their descendants inhabiting the West India islands. If such practices occurred elsewhere, they were both rare and under restricted circumstances. But in Brazil, &c. they actually feasted on the human body.

In preserving animal food, the South American Indians, cut the meat into thin slices, which they dried by the heat and smoke of fires, kindled under the wooden grate or frame upon which the meat was laid. This grate they called boucan.* This mode of curing beef, is extensively used in South America at the present time, and is called jerking the beef. The pemican of the northern Indians, is made in a similar way, though fire is not always used in the preparation. Fish was also dried and prepared in a similar manner, among the South Americans. (*Humboldt, Pers. Nar. v. 547.*)

In all these instances, the meats were prepared without salt; nor do I know but of one region, in which the Indians preserved their meats with that substance; this was among the demi-civilized Muyscas, (*Herrera, v. 77,*) and on the coast near Carthagená, &c. (*Hackluyt, W. Indies, 62, 122, 270.*)

It has been long known, that some of the South American tribes, during those seasons of the year, in which nutriment is procured with difficulty, in addition to their scanty diet, eat, or rather swallow, a quantity of clay, which has been slightly roasted over a fire. This practice, however extraordinary it may seem, is much more general than one would be apt to imagine.

Baron Humboldt (*Pers. Nar. v. 639,*) has written extensively upon this custom, and shews it to have been practiced in various parts of the world, as among the negroes of the coast of Guinea, in the island of Java, New Caledonia, and even in certain parts of Germany. To these instances, we add that some of the savages of Florida, according to Robertson, (*Hist. America, ii. 452,*) are reported to have eaten a kind of unctuous earth; and Malte Brun (*Geog. book 37,*) says, the Tungusians, eat a soft and almost fluid clay, either by itself or with milk, without suffering inconvenience from it: they call it rock butter.

As it seems impossible, that the human system can derive any nourishment from such substances, it is most reasonable to suppose, that the effect produced is merely mechanical, and removes the sensation of hunger, either by that of fullness, or by some action on the gastric juices.

After these instances, it would be reasonable to suppose, that the American Indians would eat any thing that might be converted into nutriment, and so they certainly did, speaking generally; yet in various instances, different kinds

* The Buccaneers so famous in the history of Spanish America, derived that appellation from their habit of thus preparing meat.

of animals were rejected by them as improper food. Thus Rochefort says, the Caraihs held in abhorrence the flesh of the pecary, manati, and the turtle. (*Edwards' W. Indies*, i. 146.) A curious inconsistency among a nation of cannibals!

The Kaluschians, (North West coast of America,) who eat sea dogs, cuttle fish, sea weeds, and train oil, will not eat the fat of the whale, which according to Langsdorff, (*Voyages*, 411,) "seems from some prejudice to be forbidden them; for they shew the same kind of horror at it, that a Jew does at the idea of eating swine's flesh."

Perhaps these inconsistencies are explained, by the reasons which the Abipones of Brazil assign for a similar prohibition of certain kinds of animal food; namely, that their courage was influenced by their diet.* They therefore preferred the rank flesh of the jaguar, and avoided mutton; they would eat the wild boar, but they considered the tame hog an abomination. The Chiriguannas, would not eat the vicuna, for fear they would grow woolly. (*Southey's Hist. Brazil*, iii. 165, 412.)

Similar inconsistencies, have also prevailed among other nations than the Americans. Cæsar, (*Bel. Gal. lib. 5, chap. x.*) says, that the Britons, "thought it unlawful to eat hares, pullets, or geese; though they bred these animals for diversion."

Mariner (*Acct. Tonga Ids.* 342,) observes, the natives of the Friendly islands consider the turtle a prohibited food, on account of a tradition held among them.

It is not improbable, that distinctions between animals for purposes of food, have prevailed more or less with all nations. The Jews were very particularly instructed upon this point; yet it is evident, the distinction of clean, and unclean animals, existed before the flood; for Noah is distinctly stated to have received the two classes into the ark, in very different proportions. (*Genesis, chap. 7, verses 2 and 8.*)

Garcilazo (*Royal Commentaries*, 315,) says, that the Pastous, a nation of the Peruvian empire, though "vile and sordid," eat no kind of flesh, saying they were not dogs. I believe they were the only people of America distinguished by this peculiarity.

* In Long's Exped. Rocky mountains, i. 325, &c. is a long list of prohibited articles of food, among the different bands of the Omawhaw nation. In these instances, the prohibition seems to arise exclusively from superstitious notions.

Of the Clothing, and other manufactures, of the Barbarous Indians.

The nature of the clothing used by the Indians, depended upon climate. In the northern parts of the continent, and in the extreme south, they covered themselves chiefly with furs and skins, while in the warm and tropical regions, they went either nearly naked, or wore garments manufactured from cotton, or from the fibrous barks of many different plants.

The Esquimaux, in addition to the warm clothing that their rigorous climate required, had to provide also against the effects of water, to which their occupation as fishermen, continually exposed them. This was effected either directly or indirectly by means of the train oil, with which their seal skin dresses were continually smeared.

In the more temperate regions of America, the natives made their inner garments of a kind of shammy leather, which was manufactured, after removing the hair, by rubbing the skin for some time with the brains of animals, and frequent smoking over the fire.

They also manufactured a coarse kind of cloth from the wild hemp, or other plants with fibrous bark. Kalm (*Travels*, i. 413,) observed on his journey among the Six nations, "the squaws making a stuff, or cloth, from the apocynum cannabinum.* They had no distaff, but rolled the filaments upon their naked thighs, and made strings of them, which they died of various colours, and worked into stuffs very ingeniously." The Indians of Virginia, made a similar fabric. (*Purchas*. iv. 1699.)

Smith describes the Virginia Indians, as frequently wearing mantles in the winter season made of feathers, "so prettily wrought and woven with threads, that nothing could be discerned but the feathers." (*Purchas*, iv. 1698.) Heckewelder (*Hist. and Lit. Trans.* 194,) describes the Delawares, making a similar manufacture, and Langsdorf, (*Voy.* 439,) mentions the same kind of mantle as being used in California.

Among certain tribes of the North West coast, they manufactured a coarse kind of vegetable cloth, probably like that noticed by Kalm as above quoted, and besides these made others of wool or hair, manufactured probably after a similar process. The following description given by Capt. Cook,

* Of this plant, the northern Indians also made fishing nets, pouches, &c. It has been used as a substitute for flax by the whites. (*Kalm*, i. 103. *Hutchinson's Hist. Mass.* i. 414)

(*Voy. N. Hem.* ii. 325,) we deem sufficiently characteristic, to extract in his own words:

"The hempen garments of the people at Nootka, are made of the bark of a species of pine tree, beat into a hempen state; it is not spun, but after being properly prepared, is spread upon a stick which is fastened across two others, that stand upright. The manufacturer knots this bark across with small plaited threads, at the distance of half an inch from each other. Though by this method, it be not so close or firm as cloth that is woven, yet the bunches between the knots make it sufficiently impervious to the air, by filling up the interstices, and it has the additional advantage of being softer and more pliable.*

"Their woollen garments, though probably manufactured in the same manner, have the strongest resemblance to woven cloth. They are of different degrees of fineness, some resembling our coarser rugs and blankets, and others are almost equal to our finest sorts; or, even softer, and certainly warmer, &c. The various figures which are very artificially inserted in them, destroy the supposition of their having been wrought in a loom. The wool of which they are made, seems to be taken from different animals, among which are, the wolf, and brown lynx."

La Peyrouse (*Voyage* ii. 148,) says, "these woollen garments are made from the hair of different animals, and is spun into yarn, with which, by the help of a needle, they fabricate a tissue equal to our tapestry."

Vancouver, (*Voyage*, iii. 250,) saw a chief clothed in a fine large mantle, made from the wool of the mountain sheep. But one other people of North America, made this woollen cloth according to our knowledge. Charlevoix, (*Travels*, 292,) says, that the women of the Illinois, spin the wool of the bison, and make garments of it which they dye of various colours. As the hide of this animal, prepared with the fur or wool on it, makes an excellent winter cloak, it most probably superseded the more tedious manufacture, of spinning and weaving the fur into clothing.

In Peru and Chili, we again find clothing manufactured from hair or wool, but the people of these countries were half civilized, and do not fall under our present consideration.

* Captain Cook says, (*Voy. to N. Hemis.* ii. 271,) that the bark dresses of the natives of Nootka, &c. were manufactured exactly in the same manner with those made by the New Zealanders.

In Patagonia, according to Falkner, (*Descrip. Patagonia*, 128,) some of the Indians make or weave, fine mantles from woollen yarn of the Guanaco, "beautifully dyed with many colours, which when wrapped round their bodies, reach from the shoulders to the calf of the leg."

In Mexico, the West India islands, and over South America, the natives made their clothing partially from skins or leather, but chiefly from cotton* and wild hemp, which was spun with a distaff twirled in the hand; and afterwards woven in a rude loom. Both of these instruments, may be seen among the figures of the Mexican hieroglyphics. Columbus, (*Pink. American Voyages*, ii. 93,) found looms in the island of Gaudaloupe, which he compares to those used at that time in Spain and Italy, for the purpose of making tapestry.

The spindle was used among the Guaranis of Brazil, even whilst they were walking about. (*Southey's Hist. Brazil*, i. 243.)

As may be readily supposed, the cloths thus made, were of various degrees of fineness; yet the Tupinambas, (*Purchas, Pilgrims*, iv. 1342,) are reported to have manufactured cotton so fine, that clothing made from their fabrics, when taken to France, were thought to be silk. I presume this must have been from very careless examination, or perhaps instead of being cotton, the cloth in question was made from thistle lint, or some other such substance, which they spun, manufactured, and also dyed of various colours. (*Southey's Brazil*, i. 124.) Charlevoix also notices the manufacture of nettle lint, among the South American Indians.

In the West Indies, and certain parts of South America, both men and women went naked, excepting perhaps occasionally, a small cover or flap made of various materials, which was used simply for purposes of decency; though even this was very often omitted. Columbus describes them in this state of entire nudity; and Sir Walter Raleigh observed the same thing in Guaiana. The Spanish writers enumerate many other instances. Even in North America, during warm weather, the Indians whether male or female, used nothing but the breech cloth; and in the winter, only wore in addition a mantle of fur, which was girt round the loins, and then muffled round the neck or shoulders with the

* Cotton answered every purpose among the West Indians, and South Americans, to which the wild hemp or flax is applied among the more northern tribes. The hammock was derived from them, as well as its name, which is a Haytien word. It was nearly of universal use in South America.

hands, or tied with a string. (*Hist. of Virginia by a Native*, 141.)

But speaking more explicitly, the dress of the North American Indians, consisted of a shirt without a collar, and sometimes without sleeves, made of their chamois leather, which came half way down the thigh, and was fastened round the middle of the body. They wore on their legs, leather leggings, that came a little above where the shirt terminated, and they protected their feet by mocasins of the same material, or simply the skin of some animals leg, drawn over the foot. Over their shoulders, they wore a mantle of fur, which served them at night instead of a bed.

In the winter, when a deep snow lay on the ground, the northern Indians attached to their feet a contrivance called "snow shoes." These are two light but strong frames of wood, several feet in length, with six or nine inches of breadth, covered with the skin of an animal. In this manner they were able to walk without sinking in the snow. The Laplanders, Kamtchadales, &c. use the same contrivance.

The dress of the women was very nearly the same as that of the men, their chemise, however, was more loose, and came down to the knee, or a little lower.

Both sexes decorated their garments with beads of wampum, porcupine quills dyed of various colours, feathers, fringes, pieces of copper, coarse pearls, &c. and often painted the inside of their mantles with showy colours, arranged in various fanciful figures.

The dress of the South Americans, was, for the most part, a shirt, of greater or less length, made of cotton, to which they added a mantle, or such other clothing, as necessity might require from their local situations, when near or on mountains, &c.

The mantle, as worn in Brazil, Chili, &c. was called *aobaci* or *poncho*. It was about two yards in length, by about one in breadth. In the middle of this cloth was a slit, made longitudinally, through which the head was passed, and the garment hung thus around the whole person. This kind of mantle was used among the people of Otaheite.

In very cold weather, the Indians may have covered their heads with a kind of hood, as was done by the Esquimaux; but I have not observed any head dress,* to be worn among

* That is, for protection; for they very often wore feathers, and other matters which they considered ornamental, stuck in their hair, or in a fillet tied round the head. The natives of the north west coast, in time of rain covered the head with a conical basket, which was woven so close that when not thus employed, was used to hold water (*Lewis and Clark*, ii 126.) But these baskets cannot be considered but as accidental coverings for the head.

the barbarous tribes, except those on the coast of Paria, a circumstance mentioned by Herrera, (i. 192, 197,) and which must be there considered as indicating some degree of civilized manners, as not being necessary from the warmth of climate.

Their manufactures, are referrible to more particular heads; but to speak in general terms, we may say they were both few and rude. If they manufactured wood, it was done partly with sharp stones, bones, shells, &c., and partly by fire, with which and invincible patience, they cut down trees, and made canoes, mortars for pounding corn, troughs, bowls, &c., for domestic purposes.*

Stones and flints they brought to the desired shape, by gradually breaking off small pieces with another stone, and sometimes by long continued rubbing or grinding. By this means I have seen a piece of very compact quartz, wrought into a convenient shape, which must have required the labour of many months.

They also made a coarse pottery of clay, but little superior to our tiles in quality, and which were unglazed. Some of the tribes adjacent to the river Mississippi, to a finer clay added pounded muscle shells, and made a ware, according to the Portuguese gentleman who accompanied Soto, not inferior to the ordinary earthen ware of Portugal.

According to Ligon, (*Edwards' West Indies*, i, 56,) the Caraihs of the West India islands, made a handsome light pottery, equal to that made in England, A. D. 1647.

The Tupinambas of Brazil, (*Southey's Hist. Brazil*, i. 244,) who were in many respects superior to other savages of America, made by their women earthen vessels large enough to bury their dead in erect; and by means of a white liquor, glazed the inside as well as if it had been done in Europe. Purchas (*Pilgrims*, iv. 1263,) relates, that they made pots, that looked as if they were gilded, some of which would hold thirty or forty gallons.

This glazing, as it is called, was nothing more than a varnish, made from some of the gums peculiar to the country, of which the *algarabo*, seems to have been most commonly used. (*Humboldt Pers. Nar.* v. 157, 285.)

The savage nations of America, made but little use of metals, and of those kinds only, that are found in a virgin or

* When the North American tribes boiled their food, it was accomplished by bark or wooden kettles, into which stones made red hot were thrown from time to time, until the mess was sufficiently cooked. From their wandering course of life, earthen ware would have been continually broken, and not having metal pots, they were forced into this contrivance.

metallic state. Gold and silver, they pounded or beat into plates, bracelets, and other rude ornaments. In the larger West India islands, parts of the isthmus of Darien, and northern coasts of South America, these decorations made from the precious metals were seen in such numbers, as to excite the cupidity of the first discoverers to the commission of crimes, unexampled for their atrocity.

Copper was of much more universal use; for its mines were more widely distributed over the continent, and its evident superiority to their stone weapons and implements, had, in certain places, caused it to be used for such purposes. However, generally speaking, it was sufficiently rare to be esteemed ornamental, and perhaps a much larger proportion of it was used for personal decoration, than for matters of utility or defence. But, in a greater or less degree, it appears to have been used throughout all America. On the Atlantic coasts, it was noticed by all the earlier navigators, from Nova Scotia to Patagonia. In Mexico and Peru, it was applied to those purposes for which we use iron, and they were enabled to harden and temper it to that degree, that it does not appear to have been much, if any ways inferior, to our more ordinary cutting tools and instruments.

Iron, which was undoubtedly meteoric, was made use of for knives, by an ingenious contrivance of a band of Esquimaux, as is related in the Polar expedition of Captains Ross and Parry.

I have met with no other account of iron being found among the American Indians, where it could not be traced to communications with civilized nations, unless it be, that the iron knives found among the natives of the North West coast by La Peyrouse, (*Voy.* ii. 88,) were also of meteoric origin, which he says were "as soft as lead, and as easy to be cut." I apprehend, however, there must be some mistake in this statement.

After considering their manufactures, we seem naturally led to notice their contrivances for saving human labour, which however are referrible but to one head, namely, the use of animals for draught.

The demi-civilized Peruvians, trained the lama for this purpose, and many tribes in North America, used dogs for drawing burthens. The instances are so numerous, that it is really surprising, some writers should have disputed the fact, that dogs were found in America, before Europeans imported them hither.

Soto found numbers of dogs in Florida, A. D. 1540; and the early accounts of Louisiana, constantly speak of them as being there used for draft. (*Du Pratz*, i. 110, &c.)

Frobisher, A. D. 1577, (*Hackluyt*, iii. 37, 66,) describes the Esquimaux, as yoking dogs not much unlike wolves, to their sledges. The Greenlanders have the same race of dogs, and use them in like manner. (*Egede*, 63.) Kalm, *Travels*, ii. 366,) says, that the Esquimaux, for centuries back, have had dogs, which they used both for hunting and drawing their sledges.

Coronado, in his expedition to Cibola, A. D. 1540, describes the Indians in that region, as using dogs for purposes of draft. (*Hackluyt*, iii. 374, &c.)

Of the Amusements, or Recreations, of the Barbarous American Indians.

Under this head, we propose to enumerate those gratifications, with which the savage tribes indulged themselves, during the leisure moments that occurred after successful hunting, or when their natural wants being satisfied, they sought relief from the tedium of idleness, in those amusements or gratifications, that the barbarity of their social state permitted them to employ.

As may be easily supposed, there was little intellectual in their amusements; though in some instances, they appear to have used fictitious tales, and moral apologues, not uninteresting. Mr. Schoolcraft has related several of these fictions in his tour, and there are a few printed in the transactions of the Irish academy, ix. 101.

They sometimes amused themselves with wrestling, leaping, running foot races, shooting with the bow, and such other recreations, as all rude nations naturally engage in for pastime.

A very masculine game, something resembling cricket or foot ball, was played by them throughout the whole continent, whose general character may be understood from the following description of it, as practised among the Choctaws. "The ball is made of a piece of scraped deer skin, moistened, and stuffed hard with hair, and strongly sewed with sinews. The game is played by two parties, with short sticks, who contend with each other in driving the ball between two opposite goals, about five hundred yards apart." There were some variations in the manner of playing this game, that are not deemed worthy of particular notice:

The Mexicans, for instance, struck their balls with the arm, shoulder, knee, &c., the use of the hand and foot being prohibited. Similar games of ball, have been played all over the world, and are common in Sumatra, &c. (*Marsden, Sumatra*, 237. *Forrest's Voy.* 300.)

Another game, which we shall call by its Choctaw names *Chungké*, was played by several North American tribes. It is thus described. (*Adair's American Indians*, 402.) "After the ground has been smoothed for the purpose, the Choctaw take a stone about two fingers broad at the edge, and two spans round; each party, (two or three only play at a time,) has a pole about eight feet long, which when the stone is rolled along the ground, they throw after it, and who ever throws nearest the stone, counts towards the game. The stones which they now use, were in immemorial time rubbed smooth on the rocks with prodigious labour; they are kept from generation to generation, and belong to the town."

I can vouch for the great labour employed in the manufacture of these stones, from one found in Virginia, near the Potomac, which was brought to me. It was of unusually compact quartz, and was like the truck wheel of a ship's gun carriage, about six inches in diameter, and two in thickness at the circumference. It was dished in on both sides, until a hole was made in the centre of about an inch in diameter. The whole stone was regularly formed, and well smoothed or polished.

Though this game was played by several other nations, they generally used a wooden hoop, in lieu of a stone, whose fabrication requires such considerable labour. From this latter circumstance, I am induced to believe, that those smooth stones possessed by the Choctaws, were not made by them, but have been procured by some means or other, from the ancient demi-civilized Natchez, Tensas, &c., who were an abject people, living under a despotic form of government.

I have met with nothing analogous to this game, either in South America, or in any part of the eastern continent; unless it be that the Sandwich islanders amused themselves with something similar. Captain Cook, (*Voy. N. Hem.* ii. 237,) observes, "they play at *bowls* with pieces of whetstone of about a pound weight, shaped somewhat like a small *cheese*, but rounded at the sides and edges, and nicely polished."

The Araucanians of Chili, (*Molina Hist. Chili*, ii. 109,) amused themselves with a game, precisely like that called by our boys, bandy. This game is also described by Stevenson. (*Travels in South America*, i. 17.)

The game of the dish or platter, consisted in throwing up small pieces of flat bones or plum stones, coloured differently on either side, and which were caught in a dish, or on a mat; and according to the coloured sides uppermost, the parties won or lost. This game was in general use among the more northern tribes of North America; see Charlevoix, Mackenzie, Lewis and Clark's Travels, &c. It does not appear to have been used in South America. There was a game played among the Algonquin tribes called the game of straws; in which two hundred and one straws, about six inches in length, were employed. (*Charlevoix's Travels*, 226.) It is too uninteresting to be further described. Marchand, (*Voy.* i. 448,) observed, I presume, the same game on the North West Coast, but there only fifty-two small twigs or straws were used.

The Abbé Molina, (*Hist. Chili*, ii. 108,) reports, that the Araucanians of Chili, play chess, which game has been known to them from time immemorial, by the name of *comican*.

I cannot bring myself to believe this relation, notwithstanding the very great antiquity of this game in the eastern continent. The Abbé has not given any detailed account of the manner in which it was played; and I suspect, either an error in the English translation of his history of Chili, or that the game played there, has but a very remote analogy to chess.

With these, and some other games, too uninteresting to be described, the Indians gambled to the greatest excess; they staked furniture, tools, clothes, and even their liberty, on the hazard of the game, with all the madness and folly that characterized the ancient Germans, as related by Tacitus. (*Mor. Germ.* xxiv.)

Dancing constituted another amusement of the various Indian tribes, but unlike those of civilized people,* their dances were all characteristic. Thus their war dances, represented the actions of war; they brandished their weapons, they

* Though not generally understood, I apprehend the gestures and figures of our dances, represent subjects of love and courtship. Though now an innocent amusement, they were in their original certainly licentious and immodest. The late Dr. E. D. Clarke, in his travels in Scandinavia, has made a similar observation concerning the original features of our dances.

whooped and shouted, and made gestures significant of threats and defiance.

The Pyhrric dance of the ancient Greeks, was of the same character, for warriors in armour, danced around a fire in the open air, with all the mimicry of war. I presume every rude nation has similar dances; Crawford (*Hist. Ind. Archip.* i. 123. 233,) describes such, among the people of Java, Celebes, Magindinao, &c.

The war dance among the North American Indians, was commonly performed previous to setting out on a military expedition, and seems to have answered the civilized practice of beating up for volunteers. A painted pole was sometimes set up, around which they danced, and all those who enlisted for the enterprise, struck it with their tomahawks or war clubs.

Other dances represented the stratagems of hunting, as far as could be represented in a small circle; and such dances were as various as the different animals they were in the habit of pursuing. All these dances were performed by men alone, and had no determinate step or figure; the accuracy of the representation constituted the merit of the performance, which in some respects might be considered as pantomime. An early describer of the Virginia Indians, in speaking of their dances, says, "he was the bravest fellow that made the most prodigious gestures."

I consider the visors or masks, observed pretty generally throughout the continent by the first travellers, were chiefly used for these pantomimic dances; though they were also employed in their superstitious or religious practices. Herrera (*Hist. Amer.* v. 7.) says, such were the customs in Peru.

The women had their dances among themselves, and which represented their peculiar employments. On some occasions they danced in a circle, which was enclosed by a larger one of the men. This custom, however, seems to belong more especially to the South American tribes. They had generally a musical accompaniment to their dances, either from rude instruments, or from the singing of unmeaning words, of as much import as our *tol lol de rol*; and to the same intent. Some writers have affixed a very peculiar and important signification to these sounds; for believing the Indians of America, to be descendants of the ten tribes carried from Samaria by Shalmanazer, they have fancied that they thus repeated the ineffable name Jehovah. This most ridiculous conceit, has a strange prevalence among the people of the United

States, though all the analogy of sound, is to be found in hee, hee, ho, ho, hee, hee, ho, ho,* as I have heard them used, and as Hearne, (*Journey to N. Ocean*, 354,) and Carver, (*Travels*, 172,) both describe them. The same sounds are also used among the Brazilian tribes. (*Purchas*, iv. 1338; *Southey's Hist. Brazil*, i. 203.)

Their musical instruments consisted of gourds, or the skin of some small animal, inflated and well dried, containing stones, or other substances, that would make a rattling noise when shaken. Sometimes, bunches of deer hoofs, tied to a stick, were rattled in like manner. At other times, they used a notched stick three feet long, across whose notches, another stick was drawn backward and forward, *con amore*. At other times a well dried deer skin, was shaken by one or more persons with similar melody, and sometimes being stretched over a hollow log or an earthen pot, it produced the sound of a dull drum.

The immensely large drums used by the Indians on the Orinoco, were for the purpose of alarming the country in times of invasion, and not for music.

Some nations on the Orinoco, (*Gumilla, Hist. de l'Orinoque*, i. 303,) had trumpets four or five feet long, made of baked clay, with several large globular enlargements of the tube. The sound of these instruments, to which the Indians danced, says Gumilla, "fill the soul with black melancholy." They had also trumpets or bugles, made from the bark of certain trees.

A greater perfection of musical instruments, was shewn in what has been called their flutes; which appear to have been in general use in both Americas: sometimes they made these flutes from a reed perforated with three or four holes, but more generally, at least in South America, they used the leg bone of a man or other animal; hence Southey punningly calls the instrument, the "American tibia."

The most agreeable instrument, however, to civilized ears, was the syrinx or Pan's pipe, which was in use among the natives of the North West Coast, the Caraihs, &c. This simple instrument has been known in all parts of the globe. It was an appendage to the rural deities of Greece; and navigators in the Pacific ocean, describe its use among the islanders of that sea.

* One can scarcely forbear smiling on this subject when we remember, that the Jews, who from the earliest times would not pronounce the name Jehovah, even in their religious services; should be now supposed to have forgotten every other part of their institutions, but how to profane this sacred name.

Columbus observed a musical instrument among the Haytians, (*Pink. Am. Voy.* ii. 85; *Herrera*, i. 164,) that is so unlike any instrument I have ever met with, that I must use the description there given of it. It was called maio havan, "made of wood, hollow, strong, yet very thin, and as long as a man's arm: that part where they play on it, is made like a smith's tongs; the other end is like a club, so that it looks like a calabash with a long neck. It is so loud that it can be heard a league and a half off."

The editor of Marchand's Voyages, (i. 144,) seems to think the harp, was used on the North West Coast. But as this idea was only derived from the examination of a painting made by the natives, I am inclined to suspect the observer was deceived, and called that a harp, which probably was intended for some mechanical tool or implement. I know not a single instance of a harp even of the rudest kind, having been observed any where in America.

Hitherto, we have described nothing so peculiar to the American Indians, but what analogous customs might be produced from the history of other rude nations elsewhere. But we must now take notice of a practice which originally belonged to the savages of America, and to them only, though it now constitutes an essential gratification to all the civilized nations of Europe, as well as to all the savages of Asia and Africa. We allude to the use of tobacco.

Throughout America, tobacco was cultivated wherever the climate was sufficiently mild to permit its growth. It was only in the inclement country of the Esquimaux and adjacent northern Indians, that it was not used; for the constant hostility that prevailed among the aboriginal tribes, and their ignorance of traffic or barter, prohibited its use wherever the natives were unable to procure this plant by their own labour.

The natives on the North West Coast bordering on the Columbia river, appear to have used tobacco but in small quantities, (*Lewis and Clark*, ii. 15, &c.) though their relish for it either in smoke or snuff,* does not appear to be less than that of the tribes east of the Rocky mountains. More south in California, they smoked *ad libitum*. (*Hackluyt*, iii. 432; *Venegas*, i. 68.)

The Peruvians, according to Ulloa, (*Mem. Philos.* ii. 59.) hardly make any use of tobacco, an exception which as it does not depend upon any defect of climate or soil, must be

*The Aleutians are passionately fond of snuff; (*Langsdorff's Voy.* 345;) which I presume they have learned from the Russians.

explained by the prevalence of their custom of drinking chicha, or chewing cocu; practices we shall presently describe.

These are the only exceptions that we are aware of among the Indians of America in the use of tobacco; every where else it was used, even into Patagonia. (*Falkner's Descript. Patag.* 91.)

It is a very difficult, and certainly a very curious question to solve, how the use of this narcotic plant first originated. What could induce any one *a priori* to imagine, that pleasure or satisfaction could be felt by inhaling smoke of any kind? and tobacco smoke of all other species, would seem to have the least attraction to recommend it to a second trial? I am inclined to think, that its use has originated in the practices of the conjuring doctors of the savage tribes, who somehow or other discovered its narcotic powers, and found it serviceable either in their own persons, or on the spectators of their various extravagancies. Habit, modified by different considerations, may have confirmed a practice which was found to soothe care, or excite stronger sensations in vacant and gross minds; and such being the character of the whole race, its charm was co-extensive. Unacquainted with the more pernicious stimulant of fermented liquors, smoking was its equivalent among the rude Indians of North America, and became the pledge of their hospitality, like the salt of the Arab. Even national differences were accommodated and treaties were ratified, by nations laying down their arms and smoking a national pipe, emblematical of a happy security and idleness; in which as if members of one common society they had no longer enemies to fear.

The Indians of North America used a pipe for smoking. The Mexicans filled reeds and tubes with tobacco and other plants grateful to their taste. They also smoked cigars, which method of using tobacco prevailed as far as Patagonia, the pipe being little used in South America. All these different nations, however, drew the smoke into their mouths by their own exertions. But the Indians of the isthmus of Darien, (*Waser's Descrip.* 80,) from laziness, or from some good but hitherto unassigned reason, had the smoke blown into their mouths by a servant, who having made a very large cigar, put the lighted end into his own mouth, and blew the smoke through into the opened mouth of the expecting guest.

Chewing and snuffing tobacco, can scarcely be said to have been practiced in America north of Mexico: in that empire it was partially used in these forms. But in the West India islands, and generally in South America, north of the river Amazon, and east of the Andes, snuff compounded of tobacco

and other narcotic plants, fully disputed the sovereignty of the pipe or cigar. The practice of chewing tobacco, no where prevailed to any remarkable degree.

The natives of the West India islands, snuffed tobacco and other narcotics up the nose, through a reed twelve or fourteen inches in length. Father Romans, who accompanied Columbus, says, (*Pink. Am. Voy.* ii. 83, &c.) the plant they used was called *cohobá*, and that it put them beside themselves, as if they had been drunk.

Condamine (*Pink. Am. Voy.* iv. 226,) tell us, that the Omaguas on the upper waters of the river Amazon, snuff up a narcotic powder which they call there *curupa*, by means of a forked hollow stick shaped like the letter Y; the forked end being inserted into the nostrils. He says, that the intoxication that follows this practice, lasts twenty-four hours. Humboldt, (*Pers. Nar.* v. 662,) and Southey, (*Hist. Brazil*, iii. 723,) also describe the use of this intoxicating snuff in various parts of Brazil, Paraguay, &c.

Oviedo, (*Purchas' Pilgrims*, v. 957,) says, that the Indians of Haiti, inhaled the smoke of burning tobacco up the nose by the forked reed just described.

Thus far as respects the general use of tobacco; the particular use of the calumet, belongs to the *Section* concerning War and Peace.

On the North West Coast of America, where smoking was too great a luxury to be enjoyed except on important occasions, (*Lewis and Clark*; ii. 15,) some tribes made use of a stimulus approaching very near to the betel chewing of the East Indies. It is thus described by Capt. Dixon. (*Voy.* 175.) "At Mulgraves sound, the natives are particularly fond of chewing a plant which appears to be a species of tobacco. But not content, however, with chewing it in its simple state, they generally mix lime along with it, and sometimes the inner bark of the pine tree, together with a resinous substance extracted from it."

I consider Dixon to have mistaken this plant for tobacco; for Marchand, (*Voy.* i. 341,) who describes the same practice, says the natives "prefer tobacco when they can get it."

The Peruvians chewed the leaves of a plant which they called *cuca* or *coca*, together with chalk or lime. Ulloa (*Voy.* i. 345,) says this plant is exactly the same "with the betel of the East Indies; the plant, the leaf, the manner of using it being the same."*

* I have seen somewhere, though I cannot remember in what place, that the *coca* is the *Erythroxylon Peruvianum*; but this I believe, is a tree. The betel of the E. Indies is a species of *piper*, which is a vine.

Columbus observed the Indians of Veragua, (*Pink. Am. Voy.* ii. 137,) to chew an herb along with some kind of powder, which he does not describe. Humboldt (*Pers. Nar.* iii. 225,) considers it to have been lime, which is still used by the Indians at the mouth of the Rio de la Hacha, for the purpose of stimulating the salivary glands. Purchas also (*Pilgrims*, v. 896,) says, the Indians of Cumana chew the leaves of a tree called *gay*,* mixed with lime made from burnt shells.

The Jumas and other Brazilian tribes, (*Southey's Hist. Brazil*, iii. 705,) parch and pulverize the leaves of a plant called *ipadu*, which they stuff into their mouths and swallow gradually. As it is swallowed they put in more, so as to keep the mouth always full. They say it takes away both the necessity and desire of sleep, and keeps them in a delightful state of indolent tranquillity.

The Indians north of Mexico, seem to have been without inebriating drinks of any kind. The beverage prepared by the Creeks, Chocktaws, &c. from the cassine, (*Prinos Glaber*,) and called by Adair and others, the "beloved drink," was not intoxicating.

In Long's Exped. Rocky mountains, ii. 194, we are informed, that among the Otoes (west of the Mississippi,) an unknown species of bean or seed, called the "intoxicating bean," is used by a private association of Indian sensualists of that nation. From the vague mention there made, I apprehend this bean to possess, highly narcotic powers, and that an aqueous tincture of it is administered, rather than a "beverage," for it is said a horse has been sometimes given for eight or ten beans.

The Mexicans prepared an intoxicating drink from the maguey, (*Agave Americana*) whose use however was prohibited to any persons, but those who were grandfathers or grandmothers, under pain of death.

The Indians of the Isthmus of Darien, (*Wafer*, 123,) the Peruvians, Caraihs, and Tupinambas of Brazil, &c. prepared inebriating drinks, from maize, mandioc, and other vegetable substances, according to the detestable process of brewing *kava* in the South Sea islands. A number of persons sat down together and chewed the above mentioned substances, until sufficiently bruised by the teeth, when they spit their mouthfuls into a large vessel prepared for this purpose. When a sufficient quantity was obtained, water was poured on the mass, and the mixture left to ferment. It was then drank to intoxication.

* Is not this the matté or herb of Paraguay? which the Indians there call *caa*. (*Charlevoix, Hist. Parag.* i. 15.)

From the cashew apple, the Brazilians also prepared a better and more cleanly drink, by simply expressing its juice. Others made a good beverage from honey.*

Orellana, on his voyage down the river Amazons, (*Southey's Hist. Brazil*, i. 93,) relates, that he saw "beer made from oats," in a village whence the natives had been driven by his followers. I presume it was nothing else than *chica*.

The matté, or herb of Paraguay, (*Gallium mollugo*) now so much used by the Spaniards of South America, was derived by them from the Indians of Paraguay, who call it *caa*. The leaves are infused in hot water, and sucked through a tube. It has something of the flavour of tea, and is stimulant, narcotic and diuretic; inducing intoxication if drank to excess. (*Charlevoix, Hist. Parag.* i. 15, 17; *Southey's Hist. Braz.* ii. 356.)

Among the customs just described, are two, which offer apparently striking analogies, to certain habits of the East Indians and islanders of the Pacific ocean; these we shall separately examine, and first of the chewing of leaves, &c. mixed with lime.

The chewing of the areca nut, the betel leaf, and lime together, is a practice which has prevailed at one time or other in Hindostan, China, and the great islands of the Indian ocean; extending down to New Holland, and the islands in that neighborhood. It is a curious circumstance, however, that this custom does not appear to have been observed among the natives of New Zealand, the Sandwich, the Friendly, or Society islands; or other islands in the Pacific ocean; who in other respects, offer many analogies to the Indian islanders.

One could hardly imagine that the practice of putting lime into the mouth, could have two distinct origins; yet the vast distance between the American Indians, and those Asiatic tribes that indulge in this habit, precludes the possibility of any communication between them since the earliest periods of time; which would ascribe apparently, too great an antiquity to so preposterous a custom.

* As the honey bee has been denied to have existed in America previous to the discovery by Europeans, I beg leave to mention thus incidentally in a note, that Clavigero (*Hist. Mex.* i. 90,) says, there are six different kinds of bees in Mexico; one of which "is the same with the common bee of Europe, in size, shape, colour, disposition, manners, and qualities of its honey and wax."

Garcillazo de la Vega (*Roy. Comment.* 337,) relates, "there are wild bees in Peru, that make hives in hollow trees, and clefts of rocks; and that their honey is excellent, white, clear, and very sweet."

With respect to the nauseous preparation of those intoxicating drinks used by the Peruvians, and other nations of South America, and generally known by the name of chicha, or acua, according to the language of Peru, we must observe, that the resemblance, however striking at first sight to the preparation of kava among the South Sea islanders, is perhaps after all very remote, and simply belongs to the great imperfection of their mechanical arts, and disregard to those refinements of cleanliness, which so especially characterizes civilized life.

Almost all rude nations are remarkable for their love of intoxicating drinks,* in which they indulge to an excess almost amounting to madness. With the frequent gratification of this propensity, they like all other drunkards, at last become regardless of any considerations of health or life; and therefore we can little expect such gross beings, to regard decency or cleanliness. From the earliest ages of the world, it has been known that grain bruised or mashed when infused in water, would make in a short time an intoxicating drink. This manufacture with people living in any tolerable state of comfort, would be accomplished by the means of a pestle and mortar; but a wandering and barbarous people, do not even possess this simple instrument, and the most natural method of preparing their grain for this purpose, would be to chew it in the mouth. This process however disgusting to civilized persons, is little regarded among savages. The Esquimaux women chew their husband's gloves and boots, to render them soft and pliable: (*Lyon's Journal*, 231,) and the natives of the North West Coast, (*Marchand's Voy.* i. 175,) offer to their particular friends, the mouthful they have chewed, "in order that they may have no other trouble than that of swallowing it."

Southey (*Hist. Braz.* i. 235,) says, that the Tupinambas gave their drink the name of caou-in or kaawy; which seems to be almost identical with the Otaheitan word kava, from which he seems inclined to derive it. But is it not more natural to find this word either in *caa*, the Paraguay name for

* Baron Humboldt (*Pers. Nar.* v. 151,) mentions the strange anomaly among the American Indians, of some tribes on the Orinoco, who dislike brandy. But this is a very rare exception to the universal fact, that all rude nations are characterized for delight in intoxication. Tacitus described the excess of this vice among the ancient Germans and its moral consequences, in language that has been deplorably realized in the history of the North American Indians. "If you indulge their love of liquor to the excess which they require, you need not employ the terror of arms; their own vices will subdue them." (*Mor. Germ.* xxiii.)

their tea drink, which is perhaps a generic term, or in *acua* one of the Peruvian terms, for an infusion similarly prepared? Or is it one of those original words that belong to the human race, and signifies in various languages an intoxicating drink? The word *chicha* of the Peruvians, is I am inclined to think of this kind, as may be seen in the annexed note.*

The last gratification of the barbarous Indians that we shall enumerate, will be the vapour or sweating bath, which prevailed among them throughout North America as far as the southern boundaries of Mexico. It consisted in erecting a small hut or apartment, into which hot stones were brought; water being thrown upon these, was converted into steam, occasioning a profuse perspiration in those persons shut up in the confined space. Though this bath was often used as a remedy for various disorders, it was not unfrequently resorted to as a gratification, after the exposures of hunting, fishing, &c. during inclement seasons.

The Laplanders, Russians, &c. use the vapour bath in a similar manner.

It does not appear to have been employed in South America, unless occasionally as a remedy for rheumatism, &c. The heat of the climate, sufficiently explains the reason of this neglect.

Of Marriages, &c. of the Barbarous Indians.

The parties having agreed to become man and wife, their union is declared by themselves in some uninteresting ceremonies, which took place in the presence of friends and relatives, and which terminated by the whole company partaking of a feast, attended with rude rejoicings. The solemnization of marriage among the ruder Indians, can hardly be said to deserve notice; for not only did the unmarried women live unchastely, but this licentiousness of their habits, did not in the least degree affect their character. By marriage, however, the husband acquired an authority over the wife, whereby he punished her adultery, when commit-

* This curious etymological inference I have derived from Dr. Adam Clark's notes upon Luke, 1st chap. v. 15; and Levit. x. chap. v. 9th. "The Greek word Σικερα intoxicating drink, comes from the Hebrew שכר *shecer*, which is derived from שך *shaker* to inebriate. Any inebriating drink, says St. Jerome, (Epist. ad Nepot.) is called *sikera*, whether made of apples, corn, honey, dates, or other fruits. One of the four prohibited liquors among the East India Musslemans, is called *sikkir*, and is made by steeping fresh dates in water, till they take effect in sweetening it."

ted without his permission, either by biting off her nose,* cutting off her hair, or even putting her to death. Yet there was nothing more common, than a husband lending his wife to a friend or guest.

No dowry was paid to the father of the girl, from the evident reason, that the difficulty of supporting his family was thus diminished. But in some instances, presents were made, probably to procure good will; and not unfrequently, the son-in-law remained with his wife's parents for some months, or a year, and thus his personal service was employed for the good of the family.

Concubinage and polygamy, prevailed every where throughout the continent, whenever any one was pleased to claim the indulgence. The difficulty of procuring subsistence, however, generally limited them to one wife; who might be divorced at any time, or who might divorce herself, whenever she saw fit.

I believe, the Indians universally recognized certain degrees of consanguinity, within which marriage was considered unlawful. The charge of incest among them, was to cover the infamy of European aggressions. There were no prejudices against the marriage of widows, but when their husbands had been killed in war, they would sometimes wait until his death was revenged, before entering a second time into the bonds of matrimony.

The Calchaquis, a tribe in the interior of Brazil, (*Southey's Hist. Brazil*, iii. 669,) are said to have had among them the custom of marrying their brother's widows, to raise up seed for the dead: and some of the North American tribes, are reported to have followed the same practice. (*Charlevoix, Canada*, 196.) It is not unlikely, that the brother takes under his care and protection, and perhaps marries, the distressed widow of a deceased brother, because similar practices prevail among various nations.† But that it was done with any view of raising up seed for the deceased, as was ordained by the Jewish law, is altogether an

*Cutting or biting off the nose, seems to have been among almost every nation of the world, the punishment for adultery. Diod. Sic. lib. i. chap. 4, says, it was the punishment inflicted by the ancient Egyptians. "For it was looked upon very fit, that the adulteress that tricked up herself to allure men to wantonness, should be punished in that part where her charms chiefly lay."

† The people of Java, the Hindoos, (*Crawford's Ind. Archip.* iii. 139,) and the natives of the Society Indians, (*Forster's Observations, Voyage Round the World*, 601,) recognize such marriages.

assumption of those persons, who have advocated the origin of the Indians from that people.*

It was a pretty universal custom among the Indian women of North America, to retire to the woods, or otherwise seclude themselves during their catamenial evacuation. This was especially observed among the females of the Choctaws, Chippeways, Appalaches, and some of the New England tribes. Carver (*Travels*, 152,) says, there is a house in the Sioux towns, provided for this purpose. This practice which also has been brought forward to prove the Jewish descent of the Indians, prevails among the Laplanders, (*Leems, in Pink. Voy.* ii. 377,) the natives of the Sandwich islands, &c.† (*Campbell's Voy. round the Globe*, 190,) who certainly never derived it from the Jews. The American Indians imagined, that to be touched, or to have their weapons touched by women in that condition brought bad luck either in hunting or in war.

Among the Caraibs, the Tupinambas, and other Brazilian tribes, a most ridiculous custom prevailed on the birth of a child. When a woman was delivered, the husband went to bed, and was nursed with great care until the navel string had dried away. In the mean time, the mother got up and attended to the family concerns. I am unacquainted with any North American tribe, allowing this custom, except the people of California. (*Venegas' Hist. California*, i. 82.)

Senseless as this practice seems, it has nevertheless been established among various nations of the eastern continent. The ancient Cantabrians, (*Laborde's Spain*, ii. 383,) the people of Congo, (*Malte-Brun, Geog. book*, 69,) some of the Tartars visited by Marco Polo, (*Micali Italie*, iv. 160,) and the ancient Corsicans, acted the same ridiculous farce. Lafitau (*Southey's Hist. Brazil*, ii. 238,) says, that the custom still existed in his time in the French provinces near Spain; and was there called *faire couvade*.

Some of the South American females if they bear twins, put one of them to death through a perverse sense of shame; for they say, it is only beasts, such as rats, and opossums,

* Was the custom even established among the Indians, which I altogether disbelieve, it proves nothing in favour of Jewish descent; for the institution of raising seed for a deceased brother, was established long before the time of the promulgation of the Jewish law. See history of Tamar and Judah's children, Genesis, chap. xxxviii. vers. 8, 9.

† Some of the rude mountaineers of Hindostan, consider their women impure during their catamenial evacuation; and if one in this state should touch a man, he is considered defiled. (*Asiat. Researches*, iv. 79.)

that bring forth more than one at a birth.* (*Humboldt's Pers. Nar.* v. 29.)

A deformed child is unhesitatingly killed among many of the South American tribes. (*Humboldt, as above.*) The North Americans, I believe, were more humane. I have seen a very deformed Sac chief, who moved about in a bowl, from the uselessness of his lower limbs.

Azara, ii. 94, relates, a curious circumstance of the Guana women of Paraguay, destroying their female infants so generally, as to make a great disproportion of numbers between the two sexes. This they do to make their own sex of greater consequence; and the fact is, this nation of savages is more gentle, courteous, and better dressed, than any others of the country.

A detestable custom prevailed in South America among the Guaycurus, Mbayas, and Abipones of Brazil, of raising only a single child. The women during pregnancy, used various means to procure abortion, until they supposed themselves pregnant for the last time. From this circumstance they were frequently left without any issue. (*Azara, ii. 115, 147, 156.*)

This custom was probably but of recent institution, and no doubt was circumscribed, but it has nevertheless entirely destroyed the numerous tribe of the Guayacurus. I have met with nothing analogous among the northern Indians. But it would seem there can be no custom or superstition so cruel, barbarous, or stupid, among one people, but it has been also practiced elsewhere in the world. Sir William Jones, (*Asiat. Res.* iv. 338,) describes the practice of destroying female infants, to exist among a race of Hindus, in the district of Benares. The reason they assign for this abominable custom, was the difficulty to procure suitable matches for their daughters when grown up.

According to Ward's View of the Hindoos, (*Vol.* iii. 339,) this peculiar species of infanticide, prevails much more extensively among that people than was known to Sir William Jones.

In China, also, (*Morrison's Chinese Dict.* i. 602,) the practice of drowning female infants is so common, that books have been written expressly against that crime.

* Gumilla, (*Hist. de l'Orinoco*, i. 299,) however, adds to this, that the husbands of these women also have a theory, that twins cannot be begotten by one man; and they therefore regard such births as proofs of adultery, for which they chastise and otherwise punish their wives.

The Indians of America are commonly charged with treating their wives with great brutality: Dr. Robertson says, they make them "a kind of beast of burthen, destined to every office of labour and fatigue." But such assertions are very incorrectly made; for the squaw bears no more than a fair proportion of the necessary domestic toil. The husband fishes, hunts, and fights; the wife chiefly makes the hut, the implements of huswifery, and cultivates the ground. Is the husband making a beast of burthen of her by this? If so let us imagine him to stay at home, and do the work of the squaw, while she is out in the woods and fields, exposed to all the inclemencies of weather, hunting and fishing not for pastime, as persons are apt to consider it, but under the apprehension or very sting of hunger. Then, indeed, their condition would be hard; but as it is at present, it would be impossible for the man to support the family by hunting or fishing, and at the same time to do that work, which his wife indeed could do as well as himself. I question much, if the lower class of Europeans who work for daily wages, treat their wives in a manner different from that of the Indians: The Germans and Hollanders at least, do not; nor is it unreasonable that the women should be helpmates, and assistants to their husbands, and bear a part of the labour and trouble of supporting a family, in a manner proportionate to their ability.*

Heckewelder states, that the women say, their field labours last about six weeks, while that of the men continues throughout the year. After the harvest is made, the women have little else to do, than gather wood, and prepare the daily food; and the proof that their employments are not unreasonably severe, is, that women generally live longer than the men.

It is also a great mistake to suppose the American Indians peculiar in this treatment of their wives. All rude nations are necessarily obliged to resort to the same division of labour. Thus though the ancient Germans, were remarkable for their respect of the female sex, yet Tacitus observes, (*Mor. Germ.* xv.) "they leave the management of their

* We may venture in a note, to take notice of the charge frequently made against the Indians, that they think their women inferior to themselves: Are they so very singular in this respect? However ungracious the doctrine may sound in the ears of our fair unmarried country-women, they too often experience its truth in matrimony; as remarked by Pope to Miss Blount.

Whole years neglected, for some months adored:
The fawning servant turns a haughty lord,

houses and lands to the women, the old men, and infirm part of the family."*

* Strabo remarks, (*Geog. lib. iii.*) that the ancient inhabitants of Spain, Liguria, &c. allotted husbandry, and other laborious work to their women.

In Circasia, Bulgaria, at Sierra Leone, and among the Hottentots, &c. the women cultivate the ground. (*Forster's Observations, Voyage round the Globe, 237.*)

Of the Religion of the Barbarous American Indians.

It is almost an impossible task to exhibit with any clearness of description, the gross ideas of the American Indians concerning the existence and nature of God, or of their own moral obligations.

They speak in a vague manner of a good spirit who rules over the affairs of the world, who is beneficent and kind in all his operations, but whom they little worship or regard. The chief end of their religious homage, is to propitiate the evil spirit, who if neglected, rouses up the storm, blasts their crops, destroys their game, or visits them with pestilence and death. Subordinate to these two great principles, are numerous other spirits, inferior in power, and more circumscribed in their operations, who are perpetually interfering with human affairs. Under such impressions they are superstitious according to Heckewelder, (*Histor. and Lit. Trans. 232,*) to an "incredible degree."

They believe in witchcraft, dreams, and charms; and every uncommon incident in life, is ascribed to some supernatural cause. But with all this superstition, they do not appear to have any thing like a regular, or even distinct apprehension of a religious system. The outlines of the scheme they acknowledge, is emphatically the religion of nature; for they perceive something good, and something evil in the world; which they can only comprehend to be caused, by the alternate ascendancy of good or evil spirits, whose power must therefore be nearly equal, as neither alone governs the universe. If they could be supposed to exercise ingenuity in their reasonings, they would probably refine their vague notions, into the Ormuz and Ahriman system of ancient Persia. Malte-Brun informs us, this has been done by certain negroes of Africa.

No idea is more unfounded, than that the Indians wor-

* I do not remember from what writer Strabo is here quoted; I have never seen his geography.

shipped but one God. This notion has been derived from the advocates of the Jewish descent of this race, who have perverted every fact that came to their hands, as far as I have been able to examine this matter.

The Six nations, according to Charlevoix, (*Canada*, 250,) "besides the Great Spirit and the other Gods, which are confounded with him, have an infinite number of Genii, or subaltern spirits, good and evil, which have their particular worship."

The Virginians, (*History by a Native*, 168, 170,) believed, there were tutelary deities to every town, &c.

The Sioux, (*Carver's Travels*, 250,) in like manner, believe in numerous spirits, who preside over lakes, rivers, mountains, &c., and who are worshipped according to the very slight ritual of the Indians: and such in fact, was the case throughout the continent, as may be seen in the narration of every intelligent traveller.*

The sense of moral obligation, or of conscientious restraint, among the Indians is both weak and perverted, but nevertheless their sayings and actions constantly testify that they are under the influence of moral considerations. Mackenzie (*Voy.* 136,) relates, that an Indian seen by him, attributed a paralytic affection of the limbs with which he was afflicted, to a judgment upon his "cruelty," in having burned alive a wolf and her whelps in an old beaver lodge. The reader who is aware of the savage practices of Indian warfare, cannot but wonder at this power of conscience among barbarians, whom we are apt to consider almost destitute of the moral sense. It, however, exemplifies the justness of St. Paul's observation concerning the Pagans; (*Romans*, chap. ii. v. 15,) that their consciences bear witness, and their thoughts continually accuse, or else excuse one another.

However, not to multiply facts and incidents of a similar nature, we consider the general proposition sufficiently established in their belief of a future state, and of its rewards or punishments, corresponding to their actions in the present life. This, necessarily implies a distinction, however gross it may be, between right and wrong, and upon which conscience exerts her mighty influence.

* Roger Williams, (*Key to Indian Language*, 109,) remarks, that the Narragansets, "although they deny not that the Englishmen's God made Englishmen, and the heavens and the earth there; yet say, their Gods made them and the heavens, and the earth where they dwell." He proceeds in the next page to enumerate thirty-seven Gods, whose names had been communicated to him.

When Champlain, in A. D. 1603, (*Purchas*, v. 826,) asked the Canadian Indians, what ceremonies they used in praying to their God, they replied, "they used none, but that every one prayed in his heart as he would."

It cannot be perceived, says Smith, (*Purchas*, v. 839, 841,) "that the Virginia Indians have any set holy days, only in some distress or want, fear of enemies, times of triumph, and of gathering their fruits, the whole country, men, women and children, assemble to their solemnities. The manner of their devotion is sometimes to make a great fire, all singing and dancing about the same, with rattles and shoutings, four or five hours. Sometimes they seat a man in the midst, and dance and sing about him, he all the while clapping his hands, as if to enable them to keep time; after this they go to their feasts."

Roger Williams, (*Key*, &c. 111,) quaintly says, that in the invocation of their Gods, the Narraganset priests and people, "joyne interchangeably in a laborious bodily service unto sweating, especially of the priest, who spends himself in strange antic gestures, and actions even into fainting."

The sacrifices and religious offerings of the North American Indians, were few and simple, and barely frequent enough, to enable us to recognize this most ancient institution of divine worship. It consisted sometimes, in tying the legs of an animal together, and throwing it alive, into the river or lake they were navigating. (*Henry's Travels*, 108, 127, 178, &c.) At other times, they killed an animal in honour of some demon, and eat its flesh. An essential part of the ceremony among some northern tribes, seems to have been, that every portion of the animal should be eaten.* Some tribes, it is said, preserved the bones whole and unbroken, which they afterwards burnt or buried in the ground. In like manner, however, (*Henry's Travels*, 134,) they regarded the corn-cobs, remaining after such feasts, which were not to be broken, and were required to be buried in the ground, &c.

At other times, something of more or less value to the owner, was consecrated to the spirits of the invisible world, by being deposited in particular places, or thrown into a

* This practice has also confirmed the notion that the Indians kept the Jewish passover. It was however, no uncommon practice among many pagan nations. Thus when the Greeks, (*Potter's Antiq.* i. 233,) "sacrificed to Vesta, it was usual to eat the entire animal. To send any portion abroad was considered a crime. Hence the proverb *Egia Suseiv*, and among the Romans, *lari sacrificare*, was applied to gluttons who eat up all that is set before them."

river, chasm, or torrent. In some few instances, whilst eating, they threw portions of their food into the fire, from superstitious notions.

In Long's Expedition to the Rocky mountains, i. 357, it is said, a human sacrifice was annually offered by the Pawnee Loups, for the success of their harvest. As the history of this practice was unknown to the relators, and from its being certainly an insulated custom among the North American Indians, I rather deem it a capricious institution, which even the barbarism of their condition, did not permit beyond a few repetitions.

Strictly speaking, there were no priests among the barbarous American tribes: Their function, as well as that of the physician, were exercised by persons, whom we consider better entitled to the appellation of conjurers, as their legerdemain practices shew their proficiency in this character, while their claim to the two other professions was both imposture and impudence. Yet it is very natural that these three distinct professions, should be exercised among rude nations by one individual; for the Indians consider all disease and mischance to proceed from witchcraft and supernatural causes, and not from accident or imprudence. Hence with them, as among the negroes of Africa, no one ever dies a natural death. To counteract the malice of gods or demons, the conjurers are called in upon all such occasions, and by natural inference, if any person has power enough to contend with such invisible agents, he can control the weather and seasons, bring good luck in hunting and fishing, protect from the casualties of war, cure diseases, recover lost goods, or do any thing in short, that requires supernatural means and intelligence.*

To accomplish their purposes, and maintain their credit, for there was no system common to them all but to deceive; each conjurer adopts those means, that his own sagacity and adroitness leads him to consider the most imposing, and which are frequently performed with ventriloquial powers, and slight of hand dexterity, that is not surpassed in India or China. Of this we shall recite a few instances, as exhibiting the general character of their feats.

In their visits to the sick, the general practice was to put

*But though the conjurers thus derived wealth and consequence from the prevalence of such notions, yet on the other hand they were exposed to great danger. For if a superstitious Indian believed he was bewitched by the arts of a conjurer, or was so informed by some other envious conjurer, he did not hesitate to put him to death in revenge for the supposed injury. (Stevenson's *Trav. South America*, i. 61. Dobrizhoffer, *Hist. Abipones*, ii. 224, 227, &c.)

a bone, a stone, a piece of flesh, &c. into their mouths, in such a manner as to be unobserved by any one, and then after pulling and stretching the patient's limbs, turning him over, blowing on him, and sucking different parts of his body, they at last after a long repetition of the above ceremonies, produce as the cause of the patient's illness, whatever substance they had previously concealed in their mouths. Columbus observed this practice in Hayti, at the time of the discovery. (*Pink. Am. Voy.* ii. 85.) Henry (*Travels*, 121,) describes it among the Chippeways. Charlevoix, (*Hist. Paraguay*, i. 205,) and Azara, (*Voyages*, ii. 140,) relate the same things among the Guaranis of Brazil.

At other times, their exhibitions were ventriloquial, and much more imposing. The following account given by Capt. Lyon, (*Private Journal*, 260,) of the performance of, an Esquimaux conjuror, is too complete and interesting to be abridged.

"All light being excluded, the sorcerer began chanting with great vehemence. He then, as far as I could perceive, began turning himself rapidly round, and in a loud powerful voice vociferated for Tornga, (the name of his familiar spirit) with great impatience, at the same time blowing and snorting like a walrus. His noise, impatience, and agitation, increased every moment, and he at length seated himself on the deck, varying his tones, and making a rustling with his clothes. Suddenly, the voice seemed smothered, and was so managed as to sound as if retreating beneath the deck, each moment becoming more distant, and ultimately giving the idea of being many feet below the cabin, when it ceased entirely. His wife now informed me, that the conjurer had dived under the ship, and that he would send up Tornga. Accordingly in about half a minute, a distant blowing was heard, very slowly approaching, and a voice, which differed from that we at first had heard, was at times mingled with the blowing, until at length both sounds became distinct, and the old woman told me, Tornga was come to answer my questions. I accordingly asked several questions of the sagacious spirit, to each of which I received an answer by two loud slaps on the deck, which I was given to understand were favourable. A very hollow, yet powerful voice, certainly much different from that of the conjurer's, now chanted for some time, and a strange jumble of hisses, groans, shouts, and gabblings like a turkey, succeeded in rapid order; when the spirit asked permission to retire. The voice then gradually sank from our hearing as at first, and a very indistinct hissing succeed-

ed, (in its advance it sounded like the tone produced by the wind on the base chord of an Eolian harp,) this was soon changed to a rapid hiss like that of a rocket, and the conjuror with a yell announced his return."

Henry (*Travels*, 168,) describes nearly the same performances among the Chippeways, and Falkner (*Description of Patagonia*,) among the Indians of the Straits of Magellan.

From these accounts, we may understand the practices of the wizzards* mentioned in the scripture; whom the prophet Isaiah (*chap.* vii. 19th, xxix. 4th,) says, "peep and mutter, whose speech seemed to rise out of the ground, and to whisper out of the dust."

In general, the profession of conjurer pertained to the men, but among some of the South American nations, the Abipones of Brazil, for instance, (*Southey's Hist. Braz.* iii. 400, &c.) there were female conjurers, who were more numerous, and of greater estimation than the men.

Though almost every thing of remarkable character or appearance, received a religious or rather superstitious homage from the American Indians, yet, on the whole, there were few idolatrous representations among them, and when they undertook to make figures of their deities, they were sufficiently rude and frightful. Purchas, (*Pilgrims*, iv. 1701,) gives the following description of an idol worshipped in Virginia. "The chief god of the Virginians is the devil, him they call *Oke*, and serve him more of fear than love. In their temples, they have his image evil-favouredly carved, and then painted and adorned with copper chains and beads, and covered with a skin in such a manner as the deformity may well suit with such a god."

Similar figures are described in various other parts of North America.

The Creeks have at one of their war towns, a carved statue of wood, which they undoubtedly worshipped or revered; though Adair, (*American Indians*, 22,) denies that they considered it as a deity, but that it was designed to perpetuate the memory of some hero. I think it very possible,

* The Wizzards of the scriptures, or those with familiar spirits, are called by the *lxx.* *Εγγαστριμυδοι*, belly speakers, or ventriloquists. Our English translators of the Bible, *Levit. chap.* xx. 27 v. have mistaken the proper sense of the Hebrew words. Instead of the version, "a man or a woman that hath a familiar spirit shall be surely put to death," it should be, "a man or a woman, if there shall have been with them a wizzard;" (ventriloquist) i. e. if they shall have consulted one, shall be put to death. The law was levelled against those who resorted to such superstitious and infidel practices; from very evident reason, for God himself was their governor and king. See Shuckford's *Connexions*, book 9th, on this subject at length.

that this statue originally belonged to some of the demi-civilized people of Florida, for such figures were observed by Soto, and in after times by Du Pratz, among those nations.

Columbus, (*Pink Am. Voy.* ii. 84,) describes the Haitians as having some stone idols called by them *cemies*, which were about a foot long. He also describes others, so placed that the caciques could hide behind them, and delude their simple subjects, by causing their voices to proceed apparently from the idol.

In the island of Barbadoes, (*Edward's W. Indies*, i. 51,) some fragments of Indian idols made of clay have been found. The head alone, of one of these weighed sixty pounds.

In South America, the Indians appear to have had less of religion, or at least fewer of the externals of superstition, than those of the north; and hence it is a common observation of travellers, that they had no religion at all. In South America from the La Plata to the Orinoco, says Southey, (*Hist. Brazil*, i. 204,) the savages had generally no other idols than gourds or calabashes, ornamented with feathers, &c. and containing a few stones, which rattled when shaken. These idols were called *Maraca*, and were considered capable of fortelling future events.

Lery, (*Purchas*, iv. 1339,) describes the *Maraca*, but denies positively, that they were worshipped as idols. I presume, therefore, they are to be regarded chiefly as talismans, or as magical instruments.

In some instances, however, wooden idols were observed in parts of Brazil and Paraguay. (*Southey's Hist. Braz.* i. 136, 598, 620.) The same author also reports, that the bones of the conjurers, were preserved after death as objects of worship. (*Hist. Brazil*, ii, 371.)

Humboldt (*Pers. Nar.* v. 273) says, that the *botuto*, a kind of earthen trumpet, is held sacred among the tribes on the Oronoco. It has its peculiar mysteries, to which persons are initiated by some painful ordeals. This trumpet, when sounded under fruit trees, has the effect of making them produce largely; at least the priests or conjurers say so, and are paid for thus using it.

Garcilazo de la Vega (*Roy. Comment*, 119,) tells us, that some of the Indians inhabiting the Andes adjacent to Peru, worshipped the Jaguar and large serpents, as their gods. I question the correctness of this observation; but if true, I consider it a singular and insulated circumstance.

From Skinner (*Present state of Peru*, 273, &c.) we learn that the Indians of Manoa, &c. have practices in their reli-

gious system similar to those of the northern tribes, as well as an analogous faith. They admit of a good and evil principle, but pay them little homage except in times of danger or calamity. They also have conjurers among them, who practice all the knaverics of the craft.

The *Schamans* of Siberian Tartary, the conjurers of Lapland, and the *Obi men* of Africa, are exactly like the American conjurers, exhibiting similar practices, which obviously arise from their equal state of rudeness and barbarity; and which, though modified by climate and manner of living, have the same effects. Thus, the conjurers of America, possess in a less degree only, the power of the *Obi men* of Africa, for the unhappy being who has excited their vengeance, often pines to death under the imaginary fear of their supernatural power. (*Hearne's Journey*, &c. 221.) Charlevoix (*Hist. Parag.* i, 205,) describes the same consequences among the Guaranies of Brazil and Paraguay.

It is to the conjurers that we attribute those rude paintings and sculptures observed on certain rocks in different parts both of North and South America, and which have been regarded by the Indians with superstitious veneration. Henepin (*Travels*, 135) describes one on the Mississippi, consisting of some figures made with red paint, to which the Indians were accustomed to offer tobacco, &c. when passing by in their canoes.

Lewis and Clark (*Expedition*, i. 10, 11, 113; ii. 388,) describe several such on the Missouri. One, in particular, among the Ricaras, is visited by them for the purpose of divining future events. Mackenzie, in the course of his travels, (*Voy.* lxxiv.) mentions several others which also receive religious homage from the adjoining Indians. In short, I have seen accounts of them all over North America.

In some instances these figures are engraved or cut into the rock, in a manner sufficiently rude. The one perhaps most notorious, is that on Taunton river, in Massachusetts, known by the name of the Dighton rock; concerning which, some very strange theories have been formed. To my eyes it differs in nothing from the painted rocks, except that the figures are rudely scratched or cut into the rock, which is but an immaterial difference. There are at least six such rocks in New England.* Others are found in various parts

* First, the one on Taunton river; second, at Tiverton; third, at Rutland, all in Massachusetts; fourth, one near Newport, Rhode Island; fifth, at Scaticook, on the Housatonic, (Connecticut); sixth, at Brattleborough, (Vermont.)

of the United States,* and are also met with in numerous instances in South America. (*Humboldt's Research*, i. 177; *Pers. Nar.* iv. 499; *Koster's Travels*, i. 124, &c. &c.)

I consider the inscription copied by Maupertius in his Journey to Lapland, (*Pink. Voy.* i. 254) from a rock near Torneo, to be of similar intention on the part of the Lapland conjurers.

The execution of such works, is a matter of no great difficulty even to Indians; for the miserable natives of New Holland, (*White's Voy.* 141,) also cut figures of men, women, fish, and various animals, upon the surfaces of large stones.

In like manner, I presume, we must ascribe to the conjurers, the few sculptured impressions of human feet on rocks, that have been observed in certain parts of America; and which from analogous impositions in the Eastern continent, were no doubt asserted to mark a spot sacred to some divinity, whose presence had been thus miraculously acknowledged by the solid rock.

Within a few years, the discovery of the impression of two feet on a limestone rock, containing shells and other marine substances, near St. Louis, state of Missouri, has been made public in our newspapers and journals, which some persons have gravely supposed, testifies to the induration of that rock since some individual had stood on the spot. If civilized men can thus deceive themselves, we may easily suppose it to have been a successful imposition among rude Indians.

In an account of Virginia, (*Hist. by a native*, 182) it is said, "by the falls of James river, about a mile from the river, lies a rock, wherein are fairly impressed, several marks like the footsteps of a gigantic man, each step being about five feet asunder; these the Indians aver to be the track of their God."

Clavigero (*Hist. Mexico*, ii. 15) says, that not only marks of human feet cut into stones have been found in that kingdom, but likewise those of animals, the purpose of which he was at a loss to conjecture. But any one who reflects upon the veneration that was paid to such works, can easily appreciate the motive. However, it is an ancient imposture, and is

* There are others in the state of Ohio, two miles below Indian or King's creek. On the Altamaha, in Georgia. On the Alleghany, fifteen miles below Benango. On the Cumberland river, &c.; this list, as well as that in the preceding note, is given in the *Memoirs of the Amer. Acad. of Arts and Sciences*, iii. 175.

recorded by Herodotus, ii. 257, to have been known among the Scythians, who shew on a rock, the impression of the foot of Hercules.* In many parts of India, the natives shew impressions of the feet of their gods. (*As. Res.* vi. 295.) One marked in a most curious and inhuman-like manner, is depicted in Symes' Embassy to Ava.

In China, near the Great wall, the natives still shew the impressions of the feet of one of their gods called, by a Hindoo traveller, Data'tre'ya, or Datta. (*As. Res.* vi. 483.)

Among the more sedentary Indian nations, a building was set apart for religious purposes, in which the apparatus of the chief conjurer was kept, together with some rude idols of wood or clay.

The Narraganset Indians, who were in some respects superior to the other tribes of New England, had a temple, in which a fire was kindled; and the people, at stated times, cast into the fire, by the hands of their conjurers or priests, whatever articles they esteemed valuable. (*Purchas' Pilg.* iv. 1868.) This temple was said to have been spacious.

The Indians of Virginia, also had their temples, which were simply huts or cabins of larger size than their ordinary habitations, and nothing singular in their construction. They were sometimes decorated with rude carvings and paintings, which, it is possible, had some signification understood by them. They probably, contemplated maintaining in these buildings a perpetual fire, (*Hist. of Virginia, by a native*, 166,) as was done among the demi-civilized Natchez; &c. The North American nations who erected temples of a superior construction, were those of Mexico, Louisiana, or Florida; and those nations on the N. W. coast visited by Mackenzie and other travellers, whose architectural superiority to other barbarous tribes, we have, in a general way, related in a preceding page.

At Coxe's channel, (N. W. coast) Marchand (*Voyages*, i. 409) describes "a temple standing on an elevated spot, surrounded by strong posts, six or eight feet high, in which are preserved all the tall trees that are there growing, but all the shrubs are carefully torn up, and the ground is every where put in order and well beaten. In the midst of this enclosure, where a cave is sometimes made, is seen a square and uncovered edifice, constructed with handsome planks, the workmanship of which is admirable; and a stranger cannot

* Diod. Sic. lib. iv. chap. 1, says, that there are impressions of the feet of Hercules and his oxen, to be seen in Sicily.

behold without admiration, that these planks are twenty-five feet in length, by four in breadth, and two and a half inches in thickness."

At the island of St. Catherine, on the coast of California, Torquemada (*Venegas Hist. Calif.* i. 105) states, "was a temple with a large level court, where the Indians performed their sacrifices. The place of the altar was a large circular space, with an enclosure of feathers of several birds of different colours, which I understood were those of birds which they sacrificed in great numbers; and within the circle, was an image, strangely bedaubed with a variety of colours, representing some devil, according to the manner of the Indians of Mexico, holding in its hand a figure of the sun and moon."

At the time the Spaniards visited this temple, they killed two large crows that were about the enclosure, which threw the Indians into great alarm; for they believed their Deity spoke to them by means of these birds.

Though I presume the barbarous tribes of South America, had rude temples like those we have described among the Indians of North America, they were either so few, or so little regarded by travellers, that I have been unable to meet with any description of them. Southey (*Hist. Braz.* iii. 185, 206, 395) incidentally takes notice of temples among the savages of Brazil, but does not describe them.

The account given by Charlevoix (*Hist. Parag.* i. 110) of the temple of the Xarayes, in which a large serpent was worshipped, is discredited by every judicious historian.

Certain places among the N. American tribes had a sacred character, were consecrated to peace, and where it was unlawful to shed blood. The Apalucha town of the Creek nation, which was the capital of their confederacy, was of this character. (*Bartram's Travels*, 389.)

The banks of a creek, known by the name of Pipe creek, which falls into the Great Sioux river, is also consecrated by the adjoining nations to peace. (*Lewis and Clark's Exped.* i. 49; *Carver's Trav.* 62.) It derives that character from the circumstance of its waters flowing through cliffs of red rock, of which the Indians make their pipes; (I presume the calumet,) and the necessity of procuring that article, has introduced a kind of national law, by which the banks of the creek have been made sacred. Tribes at war with each other, meet without hostility at these quarries, which possess a right of asylum.

The medicinal springs near the sources of the Wachita river, in the Arkansas territory, have likewise a sacred character, and though enemies in war, the Indians there meet as friends. Hence the country to a certain distance around, was called the "land of peace." (*Warden's Stat. Hist. U. S. ili. 135.*)

These facts so interesting to humanity, as restraining the cruel ravages of barbarous warfare, seem to have been peculiar to North America; for I have met with nothing analogous in the history of South America, nor in that of any rude people of the eastern continent, excepting perhaps, some limited spots in the Friendly islands. (*Mariner's Descrip. 81, 149.*)

The asylums of Greece, and cities of refuge of the Jews, were for the protection of criminals only, and not to arrest the fury and destruction of war.

Of the Burial of the Dead, among Barbarous Indian Tribes.

Though the ceremonies used at burials among the aboriginal tribes of America, cannot be considered, strictly speaking, of a religious nature, yet as the immortality of the soul, was for the most part directly signified in the ceremonials of their act of interment, it occurs to us, that what we have to say upon this subject, properly follows the preceding section.

As they considered the future life to be like the present, excepting a great mitigation of its inconveniencies, they buried their dead with those implements or utensils they had been accustomed to use when alive, and which were supposed to serve their requirements in the world of spirits, that they imagined to be situated in some remote country of the earth. The ceremony of burial was generally accompanied by those manifestations of grief, which even the rudest cannot restrain, when endeared friends and relations, are for ever taken from their eyes; but neither prayer nor sacrifice were offered at such times. Occasionally, an eulogium was pronounced on the deceased, (*Schoolcraft's Travels, 398,*) but perhaps as this authority is recent, the practice has been indirectly copied from the custom of the whites around them.

Some tribes of Brazil and Paraguay, are said to hurry their dead to their interment as soon as possible, and with apparent marks of brutal disregard. (*Southey's Hist. Braz. iii. 393.*) But their conduct in this particular, originates in a superstitious fear of the ghost of the person deceased.

They expressed their grief for the loss of their friends, by cutting off their hair, painting their faces black, and by abstaining from the use of personal decorations, for a greater or less period of time. In the first moments of their affliction, they almost universally lacerated their flesh, and inflicted various wounds on themselves, thrusting arrows through their limbs, &c. (*Carver's Travels*, 264; *Lewis and Clark's Exped.* i. 89.) Azara, ii. 25, says, that he has seen some of the Paraguay tribes, lacerate themselves with knives, &c. in a shocking manner.

It was a very general practice among the barbarous tribes, to cut off a joint of their little fingers, on such occasions. This practice has been observed by travellers in almost every part of America.

For some time after interment, provisions of various kinds were exposed on the grave, for the subsistence of the invisible spirit; who was believed to haunt the adjacent spot for a certain period before departing to the world of spirits.

Both in N. and S. America, the most usual manner of arranging the corpse, was to place it in the grave in a sitting position, and I believe without regard to its facing any particular part of the heavens. None of the North Americans used a coffin, but some of the South American tribes buried their dead in large earthen jars. (*Southey's Hist. Braz.* iii. 165, 619; *Humboldt's Pers. Nar.* v. 618.)

If the deceased was a person of distinction, a mound of earth was often erected over him, which practice still exists among the tribes beyond the Mississippi. Lewis and Clark (*Expedition* i. 43,) describe one of this kind, recently made over a Maha chief, of twelve feet diameter at the base, and six in height, with a pole eight feet high, rising from the centre.

Burning the dead, does not seem to have been practised by the Indians except in a very partial manner. Father Creux, a Jesuit missionary, in Canada, in the year 1639, says, (*Hist. Canadensis*, 94,) that the Hurons, (Wyandots) burned the flesh and membranes, which they cut from the bones of persons that had been drowned; but the skeleton was buried.

Vancouver (*Voy.* iii. 182, 242) observed in two instances, that the natives on the N. W. coast burned their dead; but this may have been done, to prepare the bones for a distant burial.

Venegas (*Hist. California*, i. 104,) says, the Californian Indians bury or burn their dead, indifferently, choosing whether the one or the other be most convenient.

Some tribes, exposed their dead upon scaffolds until nothing but the skeletons remained, which were then taken to some particular place, often at a great distance, which was consecrated as the national burial ground. This was the practice of the Sioux, (*Pike's Exped.* 24; *Carver's Travels*, 263,) and other North American tribes.

The Chocktaws, after preparing the bones as above described, painted the skull, and preserved them in chests or boxes, in a house called the bone house. After a certain number had been collected, they were buried in a common grave, and a mound raised over them. (*Bossu's Trav.* 298; *Bartram*, 516.)

Some of the North American tribes, as the Six Nations and Wyandots, according to Charlevoix, (*Canada*, 278,) about every eight or ten years, disinter their dead, who had been buried in different parts of the country, and carry them to a place of general and final déposite. The manner in which this last inhumation was made, is described with much spirit by father Creux. (*Historia Canadensis*, 97.) Having brought their dead together, they first dug a pit thirty feet in diameter, and ten in depth, which was paved at the bottom with stones, and after several days of preparation and savage rites, which he details at length, the various skeletons were laid down in the pit, to rest for ever. Over the whole, a mound was raised, by throwing in the earth they had dug out, together with rubbish of every kind.

The nations of South America, from the country watered by the Orinoco to Patagonia, had their national burial places. Some were in caves, as that of the Atures, (*Humboldt's Pers. Nar.* v. 618,) where each skeleton was enclosed in an earthen jar. Other tribes seem to have committed their dead simply to the earth. (*Azara*, ii. 25, 31, 118; *Southey, Hist. Braz.* iii. 405; *Falkner's Descrip. Patag.*, 118.) This last writer says, the people of Patagonia, will sometimes carry the bones of their dead three hundred miles, to the place of interment.

Among the Brazilian tribes, it was not an uncommon practice to put persons to death; to serve their chiefs in the other world. (*Gumilla, Hist. Orinoque*, i. 317; *Charlevoix, Hist. Parag.* i. 91.) None of the northern tribes, except the Natchez seem to have done this.

It was a pretty universal custom among the American Indians, to dry the bodies of their deceased kings and chiefs, and to preserve them in this state for a long time, in certain buildings or temples. This was practiced by the Indians of

Virginia and Maryland, (*Purchas*, iv. 1701,) the people of Haiti, (*Edward's W. I.* i. 73,) those of Cumana and Guiana; (*Purchas*, v. 898,) besides many others of the barbarous tribes. These dessicated bodies are occasionally exhibited to the public under the term of Indian mummies. They are not, however, in any instance that I have met with, embalmed in the least degree, and have been simply preserved, by being deposited in saltpetre caves, and other peculiar soils.

Some of the Brazilian tribes, eat their deceased relations, from motives of piety and affection. (*Southey's Hist. Braz.* i. 379.) Others made a paste of the powdered bones of their deceased friends which they eat. To offer this bread to a stranger, was the highest mark of their esteem. Some other tribes mixed the ashes of the bones with water, and drank them. (*Southey's Hist. Braz.* iii. 204, 722.) Garcilazo de la Vega, (*Roy. Comment.* 9,) says the ancient Peruvians eat their deceased parents.

This extraordinary practice has been in use in different parts of the eastern continent, and under a more unnatural appointment. Thus the Battas of Sumatra, not only eat their deceased parents, but previously killed them when old and weary of life. Herodotus asserts the Paday or Padaioi of Asia, did the same.* (*As. Res.* x. 203.)

In almost every part of the eastern continent, we meet with practices and superstitions respecting the interment of the dead, analogous to those used by the rude American tribes, and which are perhaps altogether referrible to their similar belief, that the future life was only an amelioration of their condition, and not affecting their inclinations, or altering the occupations they had followed in the present world. Therefore, the dead among all barbarians, are interred with those things that were serviceable or agreeable to them when alive; and the practice is so notoriously common, that it would be useless to adduce particular instances.

The custom of tearing the hair, and lacerating the flesh, is equally extensive, and requires no proof. Not only all rude tribes, but even some civilized nations of antiquity, inflicted severe wounds on themselves, during their mourning for their deceased friends. The only instance in which an analogy can be perceived to the practices of the American savages, is the one, in which a joint of the fingers is amputated, this strange custom, which we should consider so senseless

* Herodotus describes the Callatiæ and Isedones, also, as being in the practice of eating their deceased parents and friends.

as to hardly expect it would be tolerated even in a single nation, has prevailed in various parts of the world.

The dead, among the rude nations of the eastern continent, were generally buried in a supine position, though some nations did place the corpse in a sitting posture. The Nassamones of Africa are mentioned by Herodotus, ii. 346, for this peculiarity. Some of the Tartar nations, and the ancient inhabitants of the Orkney islands, also had this practice, as may be inferred from Pennant's description. (*Introd. to Arctic Zool.* 38.)

No practice has been more universal, than that of erecting a mound or tumulus over the dead, this custom has been observed all over the world.

Many nations of Asia, preserved the bodies of their deceased friends like the American Indians, by simply drying them. The natives of Formosa and Corea, the ancient Colchians, &c. (*Forster's Observ.* 563; *Malte-Brun's Geog. book* 43.) Some of the Tartar tribes, (*Pickart. Relig. Ceremonies*, iv. 366,) have been also remarked for this practice.

The mountaineers of Tipra in Hindostan, dry the bodies of their deceased friends, on a stage raised over a fire, "and preserve the bones for superstitious means of augury." (*As. Res.* ii. 192.)

We do not take notice of the customs of the Egyptians, or the ruder process of the Guanches of the Canary islands in this particular, as these people embalmed their dead, which I have no reason to believe was ever done by any American people.

Of the Division of Time, and Astronomical knowledge, among the Barbarous Indians of America.

The calendars of the ruder American tribes, were of the most imperfect kind, being only an uncertain division into moons, without any ingenuity. Some writers, (*Carver's Trav.* 160,) speak of their intercalating a moon or month occasionally, but I have seen nothing to justify this supposition. In the first place, what should make them solicitous to regulate their year according to solar or lunar motions, and in the second place, how could they accomplish such a purpose? An intercalation requires repeated observations and attempts at accuracy, which is entirely inconsistent with the state of society which prevailed among the savage tribes of America. The people of Quito, who lived under the line, naturally enough, observed the difference between the sha-

dows falling from perpendicular objects, according as the sun's declination was north or south, and did in part, regulate their year by this phenomenon. The Peruvians, also, made a kind of azimuth observation to the same effect; but these were demi-civilized nations, and if they who were so much superior to the savage tribes, had only been able to go thus far, I think we may safely infer, the others had not even taken the first steps.

Baron Humboldt (*Research*, i. 407,) says, however, the people of Nootka sound have months of twenty days each; fourteen of which constitute their year; to which by very complex methods, they add a great number of intercalary days.

To explain this statement, if indeed it be correct, we must imagine that some connexion anciently existed between these people, and the Tolteck or Mexican race, with whom the month or period of twenty days, was an important division of time: and it may have been continued in its present imperfect use, among the natives of that particular part of the North West Coast, from ancient recollection.

In a similar way, the Creeks have retained some of the institutions of the ancient demi-civilized Natchez.

Every where among the barbarous tribes, the moons or months, took their names either from the peculiar employment of the season, or from the natural phenomena observed at such times; and which of necessity varied with every climate.

They had no division of time into weeks, nor have the days any particular names. (*Charlevoix*, 299.)

It is said that the North American Indians, count their time by nights, and not by days, which I believe is tolerably correct. This custom, which has been sometimes considered of Jewish derivation, was common among the ancient Germans, and was taken notice of by Tacitus. (*Mor. Germ.* chap. xi.) "Nec dierum numerum ut nos sed noctium computant." We still observe this practice of our Saxon ancestry, when we say this day *se'n night*, i. e. seven night, *fort-night* or fourteen nights, &c.

The Indians, in all probability, designated the more brilliant constellations of the heavens, by names derived from their superstitions or their labours. Humboldt (*Pers. Nar.* v. 149,) mentions, the South American Indians thus distinguishing Orion, the southern cross, &c.

Condamine (*Pink. Voy.* iv. 234,) says that some of the

Indians on the river Amazon, call the Hyades, in the head of the bull, the jaw of the Tapir.

Heckewelder and Carver both state, that the northern Indians know the pole star, and direct their journeys by it on certain occasions.

Charlevoix (*Canada*, 297,) tells us, the Six nations call the Pleiades, "the male and female dancers."

Gumilla says, the Indians on the Orinoco distinguish the Pleiades by a particular name, and commence their year with their cosmical rising. (*Hist. de l'Orinoque*, iii. 255.) This fact, however, I very much doubt.

Of Government, and Law, among the Barbarous Indian Tribes.

The state of society among the barbarous Indians of America, required the surrender of little, if of any personal liberty to the general good; and though they are said to have laws and government, yet these words give no adequate idea of the actual state of their social compact. It is indeed a difficult matter for us to appreciate even the principles by which they determined their nationality; for citizenship does not seem to have been acquired by birth in any particular land or country; and though the speaking of a common language might give a stronger claim, yet this alone does not seem to have been sufficient. The only principle that occurs to us, by which the nationality of any individual was admitted, was his connexion by blood or by adoption with other individuals, who had been from their earliest remembrance, considered as constituting a part of the nation. Hence, a tribe may be considered as an association of relatives and kindred, and the nation, a general though loosely united society of tribes, who recognized in each other relations and kindred of distant degrees. This is countenanced by the terms, with which one tribe distinguishes another, such as grandfather, uncle, &c. implying a greater or less degree of consanguinity.*

* As the Indians sometimes applied these terms of uncle, nephew, &c. to tribes who spoke a language radically different, I am inclined to think they were then used from courtesy alone, as the word cousin, is employed among the European monarchs. Charlevoix, (*Canada*, 201,) in speaking of the intercourse between individuals, says, they never call a man by his proper name, and if there is no relationship between them, they use the term of brother, uncle, nephew or cousin, according to each other's age, or according to the estimation, in which they hold the person they address. It is therefore a very natural course, to apply the same terms to nations, though of a different stock.

They had certain hieroglyphic marks, by which the different tribes were distinguished from each other, and in all likelihood the chief end of the punctures, with which they marked themselves, was originally for this purpose; (*Hist. of Virginia, by a Native*, 161,) though in after times, they made them subservient for manifesting their achievements in war, or even for simple decoration. In like manner, I consider the *totem* of the more northern tribes, to be nothing but a badge, distinguishing the different tribes; in which they have assumed a distinction derived from various animals, instead of the arbitrary and more uncertain hieroglyphics of some other tribes.

There are some curious anomalies observable in the form of government among the barbarous Indian tribes. On the one hand, their theory was undoubtedly monarchical, and on the other, their practice was licentiously democratic. As our observation applies to them generally throughout the continent, it may be supposed that many shades of difference prevailed; which we shall slightly mention in the course of our investigation; but as a general proposition, our statement is undoubtedly correct. Generally speaking, the democratic feature was the most evident; for as respects the actual government of the barbarous Indians, we can scarcely say they had any, for apparently there were no persons avowedly at their head, to rule or direct their general affairs. They had neither an executive, nor judiciary; and the legislative department, consisted of any among themselves who by experience or assurance claimed a seat. Their councils, in great measure analogous to our republican town meetings, assembled only on particular emergencies, when they discussed the subject that thus immediately affected them. In general, the tribe or nation supported the views of the council, from a sense of the justness or expediency of the measure, and acted accordingly, though instances have occurred, in which a separation of the tribe into two distinct parts, arose from the difference of their opinions.

As they had no public treasury, no one received any compensation for his services. Every man acted as he pleased, and consumed the produce of his hunting or labour, without tythe or tax; and went to war or staid at home, without impeachment of his patriotism, though it affected his personal reputation as a man.

Laws they had none; but their usages and customs, were for the most part founded on principles of equity and jus-

tice. In cases of difference and dispute, their friends arbitrated between them by friendly counsel and advice; or perhaps occasionally, by their personal influence of character.

In some rare instances a kind of police officer was authorised to keep the peace.*

Many persons may wonder how the Indians thus lived together without laws and civil regulations, but they forget that the law of public opinion, prevails among them as it does with civilized nations, and it implies but a very sorry state of things among us, to suppose that we are only restrained from committing fraud and violence, in consequence of our penal laws. Indeed it would be well for us, had public opinion less control, and not authorise acts not only contrary to human statutes, but even avowedly against the commandments of God.

With the Indian, therefore, the countenance of his friends implied every thing gratifying to his feelings and pride; for who can bear the slight or contempt of his friends and equals. Even the most unprincipled sink under it to that degree, that our experience justifies the truth of the proverb, that there is honour among thieves to each other, who have none towards the rest of the world. From what we have said it will therefore appear very natural, that injuries were punished or retaliated by the injured party, in a manner that custom and usage justified, under the ban of public opinion.

Thieves were compelled to make restitution; and in default, the nearest relations were at times required to make good the loss.

Murder was commonly punished by death, inflicted by the hand of the kindred of the deceased. I believe a compromise by payments or gifts seldom or never took place. Sometimes a captive taken in war was accepted as a compensation: he was however adopted into the family of the deceased, whose situation he filled in every respect, (*Charlevoix*, 188.)

These two crimes alone, seem to have certain penalties affixed to them, and in fact, are the only ones their state of society occasioned or permitted, that can be proportionably punished. Adultery in a woman without her husband's con-

* Among the Tetons, one of the Sioux bands, Lewis and Clark, (*Exped. i.* 89,) observed a kind of officer who exercised considerable authority in maintaining the peace. No resistance is made to him, and his person is sacred. These officers hold their appointments, at the pleasure of the chief.

A similar officer of the peace is mentioned by Henry, (*Travels*, 288, 291,) as being appointed, at least occasionally, among the Assinipoils by their chiefs.

sent, was punished by him or not, as he pleased, and in what manner he chose. He sometimes bit off her nose, but in general having cut off her hair, she was discarded with disgrace.

It is occasionally said, that the Indians punished witchcraft. But this was only when an individual thought himself injured by their sorcerers, and therefore he only avenged his private wrong. There was no punishment for merely exercising magical arts, for they were distinctly recognized among them, as the essential qualification of their conjurers.

Such was the general state of government among the rude tribes of America; which seems for the most part, directly consistent with their condition and general barbarity. Yet among them other peculiarities existed, which become interesting to us, as throwing some light upon the origin and formation of government. It is usually supposed that governments have arisen from a sense of the advantages of mutual assistance. From such motives a number of free individuals are supposed to have associated together, and given up a part of their individual liberty, that their general rights and happiness might be secured. I am apprehensive, however, that the exhibition I am about to make, is not very accordant with the theoretic views, that our republican writers have generally given on this matter.

We are all familiar with the term Indian chief, or cacique, and that they possessed more or less influence, in the tribe or nation to which they belonged. For the most part we can easily comprehend, that individuals, remarkable for wisdom and prudence in council, or for skill and bravery in war, should become distinguished among their fellows, and rise to such eminence in the nation, as to be considered the chief men; and this has been the case notoriously among all the Indian tribes with which we are acquainted.* But in

* No one is acknowledged to be a chief among the North American Indians, by any form or ceremony of any kind; the dignity is attained insensibly to himself and his countrymen. Venegas, (*Hist. California*, i. 69,) explains this matter with great exactness; "the dignity of chief was not obtained among these people by blood or descent; nor by age, suffrage, or a formal election. The necessity of applying for instruction to one or more persons in some common exigency, rendered it natural that with a tacit consent, he who was brave, expert, artful, or eloquent, should be promoted to the command; but his authority was limited to terms imposed by the fancy of those, who, without well knowing how, quietly submitted to him. Yet in every particular each one was entire master of his liberty."

Among the Brazilians, before a warrior was admitted to the dignity of a chief, he had to give some terrible proofs of his ability to bear pain. (*Gumilla, Hist. Orin.* ii. 287.)

connexion with this fact, there is another not intelligible to me, of persons presiding over the Indian tribes as kings or princes, and sometimes with considerable state. Nor is this all, this dignity appears to have been hereditary, for it is sometimes described as being possessed by a child, and at other times by a woman.

It is recorded in the history of Maryland, (*Bozman, Hist. of Maryland*, 271,) at the time of its settlement, that, "the Werrowance or king, being an infant, the territory was governed by his uncle."

Cartier (*Hackluyt, Voy.* iii. 221, 242,) describes a Canadian chief from near Montreal, who visited him, borne upon men's shoulders. He further says, that the Indians have a king in every country, and are "wonderfully obedient to him."

Carver (*Travels*, 20, 166,) describes a woman, presiding over the Winnebagoes in virtue of hereditary right.

Soto (*Portuguese Gentleman*, 49, 62, 68,) found female rulers in Florida, and the Spaniards, to their infamy, put to death Anacoana, an eminent female chief in Haiti. (*Herrera, Hist. America*, i. 290.)

Carver, (*Travels*, 165,) says, "that every band among the Sioux and northern Indians, have a chief who is termed the great chief, or the chief warrior, and who is selected in consideration of his experience in war, to direct all matters of a military nature. But this chief is not considered as the head of the state, for there is another, who enjoys a pre-eminence, as his *hereditary right*, and has the more immediate management of their civil affairs. Though these two are considered as the heads of the band, and the latter is usually denominated their king, yet the Indians are sensible of neither civil nor military subordination."

Charlevoix (*Canada*, 123, 173, 182,) relates, that hereditary chiefs are recognized by the Wyandots; who if minors, have their dignity sustained by a regent, until they are of age. This dignity is also hereditary in the female line.

Smith (*Hist. New Jersey*, 139,) mentions the same peculiarities among the Indians of New Jersey; and Pike, (*Exped. 2d Append.* 10, 14,) describes, hereditary chiefs among the Osages and Pawnees.

The same features of hereditary dignity, were discerned in the West India islands and South America. Columbus (*Herrera*, i, 63,) describes a *very young chief* of Haiti, who came to see him, carried on a palanquin by his subjects, who treated him with the greatest respect.

Charlevoix (*Hist. Parag.* i. 88,) says, the Guaycurus of Brazil have hereditary caciques, who have unlimited authority over their subjects; but in this last particular I consider him mistaken, and rely more upon the statement of Azara, (*Voyages*, ii. 95,) who says, the Guanas and other nations of Paraguay have hereditary caciques, who enjoy, however, no exemption from work, or any advantage from their title, except in their council chambers. He also observes, that sometimes any Indian whatever becomes a cacique, when he has sufficient merit to be regarded as a capable man. When such is the case, the people withdraw their homage from the ancient chief; and this, he says, is the general custom among all the nations of Paraguay. Molina (*Hist. Chili*, ii. 19, 57,) observes, that the dignity of chief is hereditary among the Araucanians.

Falkner (*Descrip. Patag.* 120,) relates, that among the natives of Patagonia, the office of cacique is hereditary, and not elective; and that all the sons of a cacique have a right to assume the dignity, if they can get any Indians to follow them. Nevertheless (*page* 123,) they have no power to take any thing from their subjects, nor can they oblige them to serve in the least employment without paying them.

We have thus throughout America, shewn that the principle of hereditary dignity was recognized among so many different tribes, that I am inclined to think, if we had more full and detailed accounts, it would be discerned in the institutions of every tribe or nation of the continent. Venegas, indeed, (*Hist. California*, i. 69,) says, the people of California had no hereditary chieftains; but such might be easily overlooked by persons not very familiar with Indian manners; for they received little or no respect except on particular occasions, while the more popular war chiefs, who were thus recognized for their abilities, might be known to have deserved their title by their own individual merit.

I must confess the greatest difficulty, to explain the absurdity of hereditary dignities among barbarous savages. In this respect, however, the American Indians are not peculiar, for we shall presently shew the same principle, almost universally established in all other parts of the world. But among the greater number of Indian tribes, the title gives no importance, little if any influence, and is attended, as far as we can perceive, with no apparent advantage to the possessor. Neither can we imagine the usefulness of any such personage to the people at large, for wisdom, talents and courage, are not hereditary; and if deficient in these particulars, for what

else can the individual among savages be esteemed. Yet in defiance of all conjecture, the facts are as we have stated them, and I can guess at no principle of interpretation.

Some persons may consider it not an unreasonable hypothesis, that the son should inherit more or less of his father's talents; and that savages might be influenced by such a supposition. But savages easily perceive the merits or defects of any individual who attempts to exercise influence among them; and generally despise one falling short of their standard of excellence. How comes it then, that they can acknowledge a female as the head of their nation; one who never goes to war, nor performs any of those duties they ought naturally to expect from their chieftains? The following extract will exhibit the truth of our observation in a remarkable manner.

Dobrizhoffer (*Hist. Abipones*, i. 102,) relates, that among the Abipones, the eldest son of the cacique succeeds his father; but only provided that he be of a good character, of a noble and warlike disposition, in short, fit for the office; for if he be indolent, ill-natured and foolish, he is set aside, and another substituted, who is not related to the former by any tie of blood. The name of cacique is certainly a high title among the Abipones, but it is more a burthen than an honour, and often brings with it greater danger than profit; for they neither revere their cacique as a master, nor pay him tribute, nor attendance. They invest him neither with the authority of a judge, an arbitrator, nor an avenger. If he were but to rebuke them for their transgressions, he would be punished in the next drinking party, with the fists of the intoxicated savages. How often have their chief caciques experienced this. How often have they returned from a drinking party with swelled eyes, bruised hands, pale cheeks, and faces exhibiting all the colours of the rainbow."

After such a relation, who would expect the following statement which is made by the same writer. (*Hist. Abipones*, ii. 108,) "I must not omit to mention, that the Abipones do not scorn to be governed by women of noble birth; for at the time that I resided in Paraguay, there was a high-born matron, to whom the Abipones gave the title of Nelareycaté, and who numbered some families in her horde. Her origin, and the merits of her ancestors, procured her the veneration of others."

For the most part, the nations recognising hereditary distinctions, determine the succession by the female line. Carver (*Travels*, 166,) says, that among the northern tribes on

the death of a chief, his sister's son succeeds him in preference to his own son; and if he happens to have no sister, the nearest female relation assumes the dignity. In this manner it happened, that a woman presided over the Winnebagoes, when he visited that people.

An analogous custom of transmitting title by the female line, was established among the Wyandots; (*Charlevoix Canada*, 315,) the Arrowacks of Cuba and Haiti, (*Edward's W. I.* i. 73,) and in general throughout the continent.

As might be expected, when we have shewn that dignities were hereditary in tribes, so there were also dignities of greater eminence hereditary in the nation. Hence among the different chiefs, some one had a paramount dignity. This feature is more distinguishable among those nations we have termed demi-civilized, of whom we shall hereafter discourse; but as the degrees of barbarity among the Indian nations are very different, we can observe the establishment of this principle, among the more numerous and powerful barbarian nations, and the sensible advances to feudal forms of government. Granganameo, a chief on that part of the coast of North Carolina, visited by Amidas and Barlow, (*Hackluyt*, iii. 246, 248,) was of this description, being under the authority of a superior lord or chief.

Powhattan, in Virginia, exercised an absolute authority over his subordinate chiefs. Smith (*Purchas*, iv. 1703,) says, he was obeyed "not only as a king, but as half a god they esteem him; what he commandeth, they dare not disobey in the least thing."

The Araucanians, (*Molina, Hist. Chili*, ii. 57,) divided their country into four distinct parts, each of which was governed by a lord paramount, under the name of Toqui; but though this dignity was hereditary, the minor chiefs permitted him to use but little authority.

I believe there is no feature in the institutions of government among the American Indians, that can be considered peculiar to them; and all the strangeness of hereditary distinction among barbarous nations, is to be observed in every other part of the world.

The ancient Germans, who in many remarkable instances resemble the American Indians, exhibited a close analogy to them in this particular. They had two chiefs presiding over them in like manner as the Indians. Tacitus relates "*Reges ex nobilitate, duces ex virtute sumunt.*" This custom the Edinburgh Review (*December*, 1818,) states, to have anciently prevailed among the Spaniards until the reign of

Alonzo: and able critics and antiquarians assign this principle, as the origin of the *Maires du Palais*, of the early French monarchy.

Tacitus further remarks, that the power of the German kings was not arbitrary nor unlimited; and that the General commands more by warlike example than by authority. (*Mor. Germ.* vii.) Yet he gives us the following remarkable exception in his account of the Sitones, (*Mor. Germ.* xlv.) "Cætera smiles, uno differunt, quod fœmina dominantur; in tantum, non modo a libertate, sed etiam a servitute degenerant." In this nation arbitrary power had prevailed so far, that the common people were not permitted to carry arms.

In Britain, says Tacitus, (*Vita. Agric.* xvi.) there is no rule whereby females are excluded from the throne, or the command of armies, and therefore the Britons did not hesitate to follow in arms Boadicea, a queen descended from royal ancestors.

Tomyris, queen of the Scythians, is another instance of a female presiding over barbarians, a fact or statement well known to every reader of ancient history.

The like state of things existed in Otaheite, as is related by Cook in his account of queen Oberea. Female rulers were observed also in the Tonga or Friendly islands. (*Cook, Voy. N. Hem.* i. 308; *Mariner Tonga Ids.* 111, 155.)

The barbarous Garrows of India, also recognise female chiefs. (*As. Res.* iii. 18.) And female rulers are to be found at the present time, in Celebes, and other islands of the Indian ocean. (*Crawford, Ind. Archip.* i. 74.)

In what manner does this strange idea of hereditary distinction, exert its influence on the minds of barbarians? Is it possible to conceive the benefit or advantage that results from such a state of things? and yet so firmly established is this principle among certain savages, that Mariner (*Tonga Ids.* 128,) says, in the Friendly islands no merit, however great, can elevate a common man to the rank of a chief: Birth alone confers the distinction.

As this principle is so universally admitted, we need not wonder that a savage nobility display a corresponding pride and haughtiness, even where the barbarity of their condition would make us least expect it. Nicholas, in the account of his voyage to New Zealand, very frequently takes notice of the establishment of rank and nobility among the savages of that island; and on one occasion gives us the following description of the deportment of a chief, who observed him cleaning and salting fish: "So very aristocratical was he in

his own notions, and such was the mean light in which he held all those who employed themselves at any kind of manual labour, that looking at us with a scornful glance, he suddenly averted his eyes, as if afraid of being degraded by the very sight of our work; and exclaimed contemptuously," &c. (*Voy. to New Zealand*, ii. 35.)

Not inferior in pride, were the nobility among the ancient savages of the Canary islands: Glas (*Hist. Canaries*, 66,) informs us, that when a young man claimed his nobility before the proper officer, he was rejected among other disqualifications, if he had ever "demeaned himself so far as to have dressed victuals, or had even gone to the folds to look after the goats or sheep, or if he had been ever known to have milked them, &c."

In like manner with the customs of the American Indians, the title to these hereditary dignities, was conveyed by the female line among many barbarians of the eastern continent. Thus the Picts (*Pink. Hist. Scot.* i. 261,) choose their kings, by the female side in preference to that of the male, alleging a greater certainty of the royal blood.

The Lycians of Asia Minor, (*Herodotus*, lib. i. chap. 173,) and the negroes of Congo, (*Malte-Brun*, *Geog.* book 69,) followed the same custom.

From what Kæmpher (*Hist. Japan*, i. 23,) says upon the order of Succession to the crown of Siam, I presume the like rule existed among that people.

Of Wars among the Barbarous Indians.

Pride, ambition and avarice, which have scourged the civilized world by war, also influence the rude and barbarous to increase the misery and unhappiness of each other, with every aggravation that malice and cruelty can devise. Though such reflections belong more properly to the moralist than the antiquarian, they are not entirely out of place, as prefacing details and researches upon the manner in which barbarians carry on their wars. For we do not at first sight, perceive how men like the Indians, having so few wants, and generally so great an extent of country to supply those wants, should be yet almost continually engaged in bloody and unmerciful contests with each other.*

* We must do the Indians the justice to state, that personal rencontres very seldom took place among them, and that private assassination was of rare occurrence.

Southey (*Hist. Brazil*, iii. 389, 673,) says, the Guaycurus decided their quarrels among themselves by boxing, never resorting to weapons. Azara,

The nature of man, however, is universally the same, notwithstanding the difference of climate or intellectual improvement; and be the standard of ambition, avarice or pride, fixed at any degree of the moral scale that civilization or barbarism may determine, we shall find all the corresponding passions rising to that height, and influencing our conduct. Thus, while it is considered glorious in civilized nations, to conquer in war, and destroy thousands in battle; by the same influences, the rude Indians regard with admiration, the warrior who exhibits the most scalps of men, women and children, taken by his prowess or stratagem.

The pride of the civilized man is gratified by the use of splendid robes, jewels and insignia of rank and office; and the Indian struts about daubed with red paint, and wearing the rudest articles which may be considered ornamental in the eyes of his tribe. Hence, though the possessions or the wants of the Indian appear insignificant to Europeans, they are to him, the *summum bonum*, and he will invade or defend in gratification of his wants or desires, with all the earnestness that human nature can feel upon such occasions.

The causes that produce war among the Indians, are very nearly the same as those that produce this calamity in the civilized world. At one time it is to revenge a real or supposed injury; at other times it concerns their rights of hunting or fishing in particular situations. Or it is to possess themselves of the country of another tribe, that may be preferable to their own.* Or it may be to gratify, what is called the love of military glory, a passion that constitutes an essential part of their character, as well as of all other men.

Generally speaking, the Indians commenced their wars by committing some hostility, or doing some damage to the persons offending them; or if such individuals were out of their reach, to their kindred or nation, and the consequences soon follow, that the two tribes or nations make the quarrel common cause.

At other times, they notify the enemy of their determina-

ii. 16, 33, 91, observed the same practice, among several of the Paraguay tribes. I have not met with any account of pugilism among the North American tribes.

Gumilla (*Hist. de l'Orinoque*, ii. 231) says, that the Indians on the Orinoco, not unfrequently poison each other; and Dobrizhoffer, (*Hist. Abipones*, i. 80, 83,) incidentally mentions the occurrence of this practice in Paraguay.

* The Pottawottomies, who lived originally between lake Michigan and the Mississippi, sent word to the Miamis, "that they were tired of eating fish, and wanted meat;" and without waiting for an answer intruded themselves into their country. (*Sandford's Aborigines*, cxvii.)

tion, by sending a defiance, either in words, or by a military weapon painted red.

The war that follows, is a succession of skirmishing, surprisals, and massacres. As a chief end in their conflicts was to save themselves from loss, they seldom engaged in open battle, but cautiously advanced on their enemy unsuspecting of danger; and then, with horrid yells,* rushed on their foes, and slew every one without distinction of age or sex, not fortunate enough to make their escape.

They seldom took the field with a numerous body of men, which indeed would be almost impossible, when every warrior had to procure provision by his own exertion or labour. We may form a tolerably good idea of an Indian army, when it is remembered, that the principal chief, or general of the party, if that term be preferred, has to hunt for himself, and can only advise with his followers, upon what plan of operations they shall pursue.

Before they departed on a warlike expedition, the North American Indians waited for good dreams and favourable omens, and if they had even set out, an unhappy dream would cause them to return home. *Ovale*, (*Pink. Amer. Voy.* iv. 113,) describes the Indians of Chili on like occasions, using various superstitions, and observing auguries and omens to ascertain the fortune of the enterprise.

Most of the Indian nations made their young men submit to a severe probation of their fortitude, before they were permitted to go to war. This was the ceremony called *Huskanauing*, among the Virginia Indians.

The Guaycurus of Paraguay, (*Charlevoix Hist. Parag.* i. 88,) had also a severe trial of the fortitude of their young men on such occasions; and in all probability, the terrible self lacerations mentioned by Azara, (*Voy.* ii. 135,) as common among the Indians of Paraguay, have their origin from similar probationary exercises.†

It has been a very universal custom with martial and rude nations, to admit their youth into the class of grown men

* These yells or war whoops are not peculiar to the American Indians: Tacitus (*Mor. Germ.* chap. 3,) relates the practice of the Germans in language that exactly describes the Indian custom. He says, "the vociferation used upon these occasions is uncouth and harsh, at intervals interrupted by the application of their bucklers to their mouths, and by the repercussion, bursting out with redoubled force." This is precisely the Indian whoop. They raise a loud scream, at the same time clapping the mouth rapidly with the open hand. When the expiration is nearly finished, they cease the clapping with the hand, and collecting all their remaining force, suddenly raise the scream an octave higher, and then cease for the moment.

† "Ils ne donnent aucune raison de cette coutume, et disent ingenuement

with more or less ceremony; and according to their degree of civilization, with greater or less cruelty of preparative initiation. The Romans, the ancient German nations, and even the New Hollanders, (*Collins' N. S. Wales*, 367,) practiced similar ceremonies.

The weapons made use of by the Indians in their wars, were bows and arrows, spears, clubs, &c. which we shall describe in regular order.

With the exception of the Esquimaux, and people of the N. W. coast, who appear to be but indifferent archers, the bow generally was of great length and power. The arrow was commonly from three to four feet in length, tipped at the end with a sharp stone or bone, and occasionally with copper. They were also feathered to steady their flight.

Spears and javelins, were not much used in North America, and then only, I believe, among those tribes who were accustomed to strike fish with such instruments. Vancouver, (*Voy.* iii. 254,) describes some natives of the N. W. coast using spears in an attack upon his boats; and Venegas (*Hist. California*, i. 85,) says, the Californians used in close engagements, "a kind of wooden spears, with the points hardened in the fire."

The demi-civilized nations all used spears.

In South America, the spear or javelin, either armed with flint, or hardened by half burning, was much more used than in the north. From the mountains of New Grenada, to the river la Plata, (*Purchas Pilgrims*, iv. 1299, 1348,) they seem to have been constantly employed in war. In some instances, the javelin was fastened by a thong to the wrist, which enabled the warrior to draw the weapon back, after it had been thrown. (*Southey, Hist. Braz.* iii. 379.)

Some of the Indians of Darien, (*Herrera*, ii. 51,) threw, with great force and effect, by "a sort of sling," darts or staves, whose points were hardened by fire. The Muyscas of New Grenada, (*Herrera*, v. 86,) are noticed for the same contrivance.

The Tapuyas, and some tribes along the river Amazon, (*Southey, Hist. Braz.* i. 620,) threw their darts or javelins

qu'ils n'en savent point d'autre que la desir de faire voir qu'ils sont gens de courage." (*Azara*.)

Dobrizhoffer (*Hist. Abipones*, ii. 35,) says, they inflict these terrible wounds on their persons, to emulate one another, and to obtain a reputation for bravery.

by means of an instrument called by the Spaniards, *estolica*, which it is said was also used by the Peruvians. This instrument, or *throwing-stick*, as it is sometimes called, is described as being flat, between four and five feet long, and three fingers broad. At one end a bone rest was fixed, against which the end of the javelin was placed. When laid along the throwing-stick, the Indian grasping the stick, threw the dart from him, which flying off, left the *estolica* still in the hand, and ready to receive another weapon. It is said that they could throw their darts with great accuracy by this method.

The Aluetians on the N. W. coast, (*Langsdorf's Voy.* 342,) the Esquimaux, (*Parry, 2d Voy.* 508,) and the Greenlanders, according to Crantz, used a similar contrivance. It is called a "hand board," by the navigators above quoted.

A similar instrument was used among the New Zealanders of the South Pacific ocean, (*Hawksworth, Voy.* iii. 259,) for throwing their spears.

The Greeks, (*Harwood, Greek Antiq.* 292,) anciently threw their darts by a strap.

Many tribes, both in North and South America, used a long and hollow reed for projecting small darts or arrows by means of the breath. Though this instrument was used chiefly in hunting or for amusement, yet it was also occasionally used, especially in South America, for warlike purposes. Bossu (*Travels*, 306,) notices it among the Chocktaws, and gives the following description: "They are very expert," says he, "in shooting with an instrument made of a hollow reed about seven feet long, into which they put a little arrow, feathered with the wool of the thistle, which they blow at small birds."

This reed was also used in Mexico, and was there called *cerbottane*, which has been corrupted to *sarbacane*, by which appellation it is now generally known. Montezuma compared the muskets of the Spaniards to this instrument.

Dampier (*Voy.* i. 41,) describes the sarbacane, among the natives of the Isthmus of Darien; and they were also used in Surinam, (*Pinkard's W. Indies*, ii. 407,) and Guiana, where they became a formidable weapon from the practice of poisoning the dart, and the distance to which it could be projected. Waterton (*Edinburgh Review*, Feb. 1826,) says, a reed ten or thirteen feet long, would enable a person to throw a dart three hundred feet.

This tube is well known in the islands of the Indian ocean, especially in Borneo, and the less civilized islands of

the Archipelago. (*Raffle's Hist. Java*, i. 296.) These darts are generally poisoned with a vegetable preparation.

It was a pretty general practice with the Indians inhabiting the country watered by the Orinoco and the lands adjacent, to poison their weapons both for purposes of hunting and war. It is not easy to say how far this custom prevailed. Herrera (vi. 35, 236,) describes it to have been done in Tucuman in the south west; and in one instance in Quito, at Rio de la Hambre; (iii. 373,) and also at Old Guatemala, (iii. 336, 337,) in the north.* The Indians inhabiting the country between the river Amazons and the mountains of New Grenada, have been especially distinguished for this barbarous practice among themselves. Against the Spanish invaders, no practice can be considered barbarous.

The poison used by these people is known by the name of *Curare*, and is of the most deadly kind, though it does not injure the flesh of animals thus killed for the purposes of food. It is a vegetable preparation, and the process for making it may be seen in Herrera, (*Hist. America*, i. 349,) or Humboldt, (*Pers. Nar.* v. 516.)

I know of no well authenticated instance of any North American Indians poisoning their weapons. In a book entitled *Indian Wars in the West*, page 181, it is said, that the Catawbias on one occasion, to destroy their enemies, placed in a path sharp sticks smeared with the poison of the rattle-snake; but this seems to me incredible, from the small quantity that could be procured even with the greatest industry from such reptiles.

The fact of poisoning the darts used with the sarbacane, we have already mentioned as being practised by the islanders of the Indian ocean. They also poisoned their arrows. This was also done by some of the mountaineers of Hindostan. (*As. Res.* iv. 81, 89.) Tolland (*Hist. Druids*, 102,) mentions an occasion, when the ancient Britons poisoned their arrows used in battle.

The sling was but little used among the barbarous tribes. Egede, (*Hist. Greenland*, lxiii.) says, it was used by the Greenlanders, and the Esquimaux employed it against Davis in 1585. (*Pink. Am. Voy.* ii. 191.)

* Though I have taken notice of the Spanish account, that the Indians near Old Guatemala poisoned their darts, as being the most northerly instance I have met with; yet I am inclined to think it an exaggeration, or rather not true in fact. The practice is not mentioned by Bernal Dias, who was engaged in the conquest of that country, and who was too vain-glorious, to have omitted this circumstance in the enumeration of his personal dangers, if it had been practised in that kingdom.

Some of the South American tribes at least occasionally used the sling. (*Southey's Hist. Brazil*, iii. 175,) Dobrizhoffer, (*Hist. Abipones*, ii. 360,) says, incidentally, that the Guaranies were expert in the use of this weapon.

The Indians inhabiting the country adjacent to the river La Plata, used a missile weapon peculiar to that part of America, which is now called *bolas* by the Spaniards. Falkner (*Descrip. Patag.* 130,) describes it as consisting of two or three round stones, each covered with hide, and connected together at a common point or centre by as many pieces of hide rope, each three or four feet long. The person using it whirled these balls around his head, so as to give the whole a rotary motion, and then threw them at the particular object with such dexterity, as to entangle man or beast according to Azara, ii. 46, even at the distance of one hundred paces.

Southey (*Hist. Brazil*, ii. 369,) describes this instrument, as having been very fatal to the first settlers on the La Plata and in Paraguay. The Indians of Paraguay, Patagonia and Chili, made use of a running noose in their battles, which they threw with great dexterity over an enemy, as far as thirty or forty paces distant. It is now called *lazo* by the Spaniards, is made of hide rope as thick as the little finger, and together with the *bolas* just described, is constantly used in hunting, and not unfrequently in battle at the present day.

The Peruvians, (*Herrera*, v. 25,) anciently used this contrivance. It seems to have been confined in America to the nations we have mentioned. It was in ancient times used in Asia; Herodotus, (*Polym. chap.* 85,) describes it being employed by the Sagartii, one of the Persian tributaries in the army of Xerxes.

The Alans appear to have possessed a similar contrivance; for Josephus, (*Jewish War*, chap. vii. book vii.) describes Tiridates king of Armenia, to have been in great danger from a net cast over him, from a great distance.

The Huns, Jaxamati and Parthians, used the *lazo*, as appears from the following description of Ammianus Marcellinus, (*Cura Valesii*, 617,) "hostesque dum mucronum noxias observant, contortis laciniis illigant, ut laqueatis resistentium membris equitandi vel gravandi adimant facultatem."

The tomahawk, which is sometimes considered a weapon peculiar to the American Indians, was originally a club carved into some convenient shape. It was most commonly a stout stick, about three feet in length, terminating in a

large knob, wherein a projecting bone or flint was often inserted. The hatchets of the Indians that are now called tomahawks, are of European device, and the stone hatchets so often found in our fields, and called by the same term, were not military weapons but mechanical tools.

The common notion, that the Indians threw their tomahawks in battle at their enemies, is as absurd as to suppose, that the pistols of a hussar are thus used, because they may be occasionally thrown at an enemy, after being discharged. The French call the tomahawk, *un casse tête*, or "skull breaker," which emphatically declares its use.

The Pogamoggon used by several North American tribes, was a weapon of similar use, and is thus described by Lewis and Clark. (*Expedition*, i. 425.) "The Shoshonee Indians use an instrument which was formerly employed among the Chippeways, and called by them pogamoggon. It consists of a handle twenty-two inches long, made of wood, covered with leather, about the size of a whip handle. At one end is a thong two inches in length, which is tied to a round stone, weighing two pounds, and held in a cover of leather. At the other end, is a loop of the same material, which is passed round the wrist to secure the instrument, with which they strike a very severe blow."

Carver (*Travels*, 192,) describes a similar kind of weapon, in use among some tribes west of the Mississippi. This is a stone curiously wrought, and fastened by a string a yard and a half long to the right arm, a little above the elbow. They swing this stone in battle, in the manner of a club, with great dexterity.

We do not meet with weapons like the pogamoggon elsewhere in America, except in Patagonia; where Falkner (*Descrip. Patag.* 130,) and Azara (ii. 47,) describe it in nearly the same words as is done by Carver.

The *Masse d'armes* of Roland and Oliver, so famous in the history of Charlemagne, was of the same form with the pogamoggon, though much heavier. See French Encyclopedia, art. *Armurier*.

There is nothing peculiar in the kind of club employed by the American Indians, except among those of Brazil and Paraguay, where a heavy and powerful one was used under the name of *macana*; which is thus described: The *macana* or *tacape*, was five or six feet in length, and shaped like a broad paddle, sometimes nearly a foot in breadth, and an inch and a half thick at the widest part, but brought to an edge all round. As it was made of the iron wood, or such

like heavy wood, it was little inferior in execution to an iron axe. (*Lery in Purchas*, iv. 1334. *Southey's Hist. Brazil*, i. 205.)

The same weapon in every respect was used among the natives of the South Sea islands, where it bears the name of *patoo-patoo*.

No nation of America but the Toltecs or Mexicans, possessed any weapon like a sword, and their substitute for it was a long stick, set with two opposite rows of sharp flints, and which was wielded like the sword.

The Greenlanders, (*Hackluyt*, iii. 38,) the Sioux, (*Carver*, 193,) and some of the Rocky mountain Indians, (*Mackenzie, Voy.* i. 36,) are said to use daggers of bone; but I think it most probable, that the instrument noticed by the travellers above mentioned, was a knife for their necessary uses, rather than a weapon.

In a few instances it would seem, that some of the barbarous tribes, attempted to protect themselves in time of battle, by a kind of defensive armour. Charlevoix (*Canada*, 143,) describes the Algonquin and Iroquois nations, as using in former times a kind of cuirass, made of rushes or pliable sticks worked together like basket work; the use of which they discontinued from finding it no protection against fire arms.

Herriot (*Hackluyt*, iii. 276,) in his description of Virginia, says, that some of the natives, had "armour made of sticks wickered together with thread."

A more common defence however against missile weapons, was attained by covering the body with several undressed skins, or the hides of various animals. But though thus used both in North and South America, I do not think the practice was ever very general. Lewis and Clark (*Exped.* i. 425,) relate, that the Shoshonee Indians united the skins employed for this purpose with a mixture of glue and sand. In this particular I believe they are remarkable.

No defensive armour of any other kind was used, except the target or shield, which was pretty generally employed in both North and South America. Some tribes west of the Mississippi, still use them in their wars, but generally they have fallen into disuse; for being made of hide or wood, they are no protection against a musket ball, and besides are incommodious to the management of a gun.

From the evident importance of military signals in time of battle, the Indians may be said to have had a kind of rude military music. In North America, their skill did not ex-

ceed the use of conchs, and occasionally the addition of a bad drum. In South America it would seem the system was more perfect. Gumilla (*Hist. Orinoque*, ii. 294,) says, the Indians on the river Orinoco use trumpets, bugles, and drums, to direct their march and excite them to combat. It was in this manner they encountered Orellana. The immensely large drums* used by the Indians on the Orinoco, were not properly military, as their purpose was to alarm the country in case of an invasion. Gumilla says they may be heard three or four leagues distant. They were made entirely of wood, and were beaten on the side in a particular place. If struck elsewhere they give no sound.

For purposes of defence against sudden surprisals, many tribes both in North and South America, fortified their villages by fixing rows of strong pickets around them, and sometimes by raising an earthen bank or wall, into the top of which was planted a row of palisadoes. This practice prevailed as might be supposed among the more sedentary tribes. We shall mention in a future page, the fortifications of Mexico, and those of Florida and Louisiana, the storming of which cost the first Spanish invaders much trouble and blood. But works of an inferior kind, were by no means uncommon among the rude tribes.

Thus the town of Hochelaga, near Montréal, in Canada, was described by the first French navigators of the St. Lawrence, to be of a round form, encompassed by three lines of wooden ramparts about two rods high. There was but one entrance through this wall, which was well secured with stakes and bars. On the inside of the rampart, were stages accessible by ladders, on which heaps of stones were laid in a proper manner, by which the inhabitants could, together with their other weapons, defend their town, which consisted of about fifty houses. (*Hackluyt*, iii. 220.) Charlevoix, (*Canada*, 241,) describes the palisadoing of towns among the Canada Indians as a common practice.

Champlain describes a fort, made of "a number of posts set very close to one another," on the St. Lawrence above Trois Rivieres. (*Purchas*, iv. 1612.) In another account, page 1644, the writer speaks of "forts which are great enclosures, with trees joined together like pales, within which are their houses."

The Chevalier Tonti (*Trans. N. York Hist. Society*, ii. 223,) says, speaking generally of the North American In-

* Gumilla says these drums were near three ells, (*aunes*) in length, and as large as two men could grasp.

dians, that they know how to "fortify their camps with entrenchments and palisadoes."

Amidas and Barlow (*Hackluyt*, iii. 248,) describe the Indians on the coast of North Carolina, as fortifying their towns with palisadoes.

Many nations on the Missouri, still throw up earthen embankments around their villages; as may be seen recorded in Lewis and Clark's expedition, i. 54, 92, 94, 97, 112, ii. 380, &c. As these ramparts do not appear to exceed four or five feet in height, they were probably calculated to receive a row of palisadoes.

Pike, (*Expedition*, 19,) says, that the Sioux, when in danger from enemies in the plains, very soon cover themselves, by digging holes and throwing up small breast works.

The South American tribes, fortified themselves in like manner with pickets and palisadoes, as may be seen in Southey's *Hist. Brazil*, i. 162, 185, and various other places.

The Indians of Buenos Ayres, and the western parts of Paraguay, fortified themselves with much labour, by ramparts, ditches, &c. See account of Mendoza's invasion. (*Purchas*, iv. 1352, 1356, 1361, *Charlevoix, Hist. Parag.* i. 156.)

The Indians on the North West Coast, and no doubt elsewhere, secured their villages by locating them in places of difficult access, and further protected them by some artificial defences. Dixon (*Voy. to North West Coast*, 206,) describes one, which he states to be exactly like the fortified towns of New Zealand.

Professor Pallas mentions frequently in his travels, the earthen fortifications of Russian Tartary, which are compared to American works of a similar kind. We suppose, that he alludes to those ancient works of considerable magnitude observed in the Western country; but these we believe, to be the monuments of a demi-civilized people, who will be treated of hereafter.

The Indians of North America, generally tore off the hairy scalp from their slain enemies, which they bore off as a trophy of their prowess. This practice prevailed from the tribes adjacent to the Esquimaux, to the frontiers of Mexico, but neither in that empire nor elsewhere to the south, do we distinctly recognize the practice of scalping. The barbarous Chichimecas, (*Herrera*, vi. 394,) adjoining the Mexicans, are the most southern people remarked for this custom. And except in California, where they scalped the dead, (*La Peyrouse, Voy.* ii. 223,) the practice does not seem to have

crossed the Rocky mountains but in a partial manner. Lewis and Clark, (*Exped.* ii. 47,) were struck with this fact, and observe on descending the Columbia river, among the Chilluckittequaw nation, "the chief shewed us fourteen fore fingers taken from enemies; this is the first time we had ever known the Indians to take from the field any other trophy than the scalp." In further corroboration we may add, that the natives of Nootka Sound, (*Mears Voy.* i. 200, 224, 288, 330,) carry the skulls of their slain enemies off the field as trophies, and hang them up in their houses.

The South American Indians in general, cut off the head for a trophy, Charlevoix however says, (*Hist. Parag.* i. 92, 199,) the Guaycurus of Paraguay bring home the scalps of their dead enemies, with which the women adorn themselves. It is also stated, (*Southey's Hist. Braz.* iii. 721,) that the Yucunas of Brazil, preserved scalps taken in war. But notwithstanding the term scalp, I rather think that the Brazilians did not use the northern practice; for their general trophy was the skin flayed from the face. (*Southey's Hist. Brazil*, i. 162, 345.) If the nations just mentioned, did really scalp, the practice at any rate was very circumscribed in South America.*

The South American tribes, very generally made flutes of the bones of those they had slain in war, which were shewn as their trophies.

It was likewise a practice among the Brazilian tribes, (*Purchas*, iv. 1189,) to cut a hole in their own mouths, cheeks, eyebrows or ears, for every foe they had slain.

Gumilla, (*Hist. Orinoque*, i. 193,) describes the Caribs, as wearing necklaces of human teeth as their trophy.

Scalping, certainly prevailed in eastern Asia among the Tartar nations of antiquity. Herodotus, (*Melp.* c. 64,) thus describes the Scythian practice; "the Scythians strip the skin from the head of their slain enemies in this manner. They make a circular incision behind the ears, then taking hold of the head at the top, they gradually flay it, drawing it towards them; they next soften it in their hands, remov-

* Dobrizhoffer, (*Hist. Abipones*, ii. 408,) says, the Abipones cut off the heads of their slain enemies; but if they be obliged to remove suddenly, "they strip the heads of the skin cutting it from ear to ear beneath the nose, and pull it off along with the hair."

Though this practice is undoubtedly scalping, yet it seems by the above account, to have been applied only to heads already cut off; and when it was desirable to relieve themselves from any unnecessary weight of transportation.

ing every fleshy part which may remain, by rubbing it with an ox's hide; they afterwards suspend it thus prepared, from the bridles of their horses, when they both use it as a napkin, and are proud of it as a trophy; and whoever possesses the greater number of these, is deemed the most illustrious."

But besides this practice, he describes them as also preserving the skin and nails of the right arm, and that some will prepare the skin of the whole body, as a covering for their horses.

Ammianus Marcelinus, (*Valesii*, 620,) describes the Huns as scalping the dead. "Nec quidquam est quod elatius jacent, quam homine quolibet occiso: proque exuviis gloriosis, interfectorum avulso capitibus detractas pelles pro phaleris jumentis accomodant bellatoriis."

It has been thought by some authors, that the Gauls in like manner took away the scalp as a trophy. Macauley (*Rud. Pol. Science*, 321,) quotes Strabo as saying, that when the Gauls were returning from battle, they used to suspend the scalps (κεφαλαι) of their enemies about the necks of their horses; and afterwards set them up as trophies in their houses. And Livy also as describing the Gauls, "Equites pectoribus equorum suspensa gestantes capita et lanceis infixæ." I think, however, the above quotations only justify the idea of cutting off the whole head; for Livy (*Lib. xxiii. chap. 24.*) observes, that the Gauls after cutting off the head of the consul Posthumius, emptied the head, *as their custom is*, and mounted the skull with gold, of which they made a consecrated vessel. If this was their custom, they could not have scalped.

It has also been thought, from a passage in Polybius, that the Carthagenians scalped their enemies. But it is evident on that occasion, it was a barbarous act of torture on living men. It occurred in the mutiny of Spendidus and Matho, and is thus described. (*Hampton's Polybius*, i. 154.) "After cutting off the hands of the prisoners, they then tore away the scalp from the heads of these unhappy men, and having broken and miserably mangled all their limbs, cast them still breathing into a pit."

It is incorrect to say the Carthagenians did this; it was their allies, who were of various nations. But it was evidently done with different views from those of the American Indians, or the Huns, who only take these trophies from the dead, as marks of their prowess.

There are but few instances of this practice among the

more modern nations of the old continent, and those chiefly among the Tartar races. The Turks (*Mod. Univ. Hist.* iv. 6,) are said, to have scalped the dead who were left on the field after the defeat of the emperor Manuel.

The Arabs, at least on one occasion, are said to have scalped their dead enemies. (*Mod. Univ. Hist.* i. 284.) "His men cut off all the heads of the Greeks they had slain, *scalped* them, and carried them fixed on the point of their lances."

The practice of the North American Indians in scalping their enemies, has been insisted on as a strong proof of their descent from the Tartars, and other nations of Eastern Asia. But though the conformity of practice be evident, it does not appear to us to warrant so positive a conclusion. We know that barbarians every where, take something or other from a slain enemy as a mark of victory, and this principle is well recognized even among civilized warriors, who regard the arms or ornaments of a conquered foe with similar pride. The savage more generally mutilates the dead body; he cuts off the head, the ears, the hand,* and sometimes a less equivocal token of virility, as is related by Bruce, (*Travels*, iv. 652,) of the Abyssinians.

We consider the practice of scalping as practiced by the Scythians and American Indians, to have arisen from the peculiar manner in which those nations generally shaved their heads, leaving only a tuft of long hair on the vertex, which thus becomes a prominent object, and seems to be the most natural trophy they could take from a dead enemy, who for the most part was naked, and without arms or property of any material importance; and the mere possession of which, did not guarantee the fact of a personal triumph over an enemy.

The Indians of North America do not make prisoners of war, unless they have a reasonable expectation of carrying them safely off; they almost universally put to death those, who from wounds or other disability, are unable to keep pace with them in their retreat.

Many of the North American tribes, when they had captured an enemy of distinguished military reputation, in the spirit of revenge and exultation, put him to death by fire and torture, in which every contrivance that malice and cruelty

* The Tartars now cut off locks of hair, and the ears, as their trophies. (*Mod. Univ. Hist.* iv. 354.)

The people of Nepaul cut off the nose and lips. (*As. Res.* ii. 319.)

The natives of Java sometimes cut off the ear. (*Crawford, Indian Archip.* i. 244.)

could devise, were inflicted upon the unhappy captive. They generally not only bore the torture with seeming indifference, but reproached their tormentors, with their ignorance of not knowing how to put them to the exquisite pain that they had inflicted on their relations and friends.

Captives of inferior note, after being very brutally treated on their arrival at their enemies' villages, were usually adopted into the nation by women who had lost their husbands, sons, or even other of their kindred, to whose rights and privileges they succeeded in every particular, and were as much under the protection of the tribe afterwards, as if they had been born among them.

Women were distributed among the men, and children in like manner, to whoever had need or would take charge of them. They were commonly considered as servants or slaves. The men are sometimes also treated as slaves, but generally speaking this was rare in North America,* but common in Brazil and Paraguay.

I know of but one instance in which a female prisoner was put to death by torture. This was among the Indians living near the bay of St. Bernard. (*Joutel, Nar.* 128.)

The customs of the South American nations varied considerably from those of the North; except in the following particulars. They do not appear to have tortured their captives to death, but some nations fattened them, and made a feast on the body. Azara denies the cannibalism of the Paraguay tribes, but he is in opposition to a number of creditable travellers and missionaries, who are abundantly explicit as to the fact, and who expressly state, that the attachment of the Indians to these detestable feasts, was the chief obstacle

* Bartram (*Travels*, 185,) describes a Creek chief attended by Indian slaves captured in war. The same writer observes, (pages 184, 211,) that slaves marry among themselves, and that their children become free and enjoy the rights of the nation in every respect, though the parents may continue slaves all their lives.

Though not altogether relevant, I think it proper to introduce in this note an important fact, which may serve towards estimating the moral and political effects of the African slave trade, in that unhappy quarter of the globe.

The French missionaries in Canada, lamenting the horrid tortures inflicted by the Indians upon their captives, encouraged the practice of buying them, from the humane and religious motive of preserving their lives. The consequence was, that the Indians perceiving the value of prisoners, waylaid and surprised individuals, and made war on one another for this very purpose, and filled the whole country with war and desolation. In the mean time, they continued to burn and torture all who fought bravely against them, and only sold women and children, and those prisoners who were little distinguished. Thus the humane attempt of the missionaries, occasioned such enormous outrages, that they had to petition the French king to repeal his act authorizing such purchases, and to forbid his subjects to buy any Indian captives. (*Carver's Travels*, 225.)

to their civilization. (*Southey's Hist. Braz.* i. 218, &c. and *Purchas*, iv. 1189.) As far as I have been able to inquire, cannibalism prevailed in the northern parts of Paraguay, Brazil, Guaiana, and the adjacent countries possessed by the same races of men. The practice does not appear to have extended (unless very partially) to Peru or Chili, and I believe no where north of the mountains of New Grenada* unless as an isolated and extraordinary circumstance.† The Atacapas of Louisiana, (*Du Pratz*, ii. 152,) are said to have been anciently cannibals, but I know not upon what particular authority the statement is made.

I do not think that the savages of the eastern continent generally, put their prisoners to death with the cruelties of the North American tribes, though we are not without instances of such barbarity among them.

Omai represented to us, (*Cook's Voy. N. Hem.* ii. 149,) that the Otaheitans torture their enemies when captured, by tearing out small pieces of flesh from different parts of the body, cutting off the nose, tearing out the eyes, &c.

Exchanges of prisoners were never made between the Indian tribes; for whenever any individuals are captured, their own relations as well as the nation at large, look upon them as dead; and were they to return after having been preserved from death by the mercy of the captors, they would be condemned by their nearest relatives. (*Carver, Travels* 224.) It is on this account, when a prisoner has been adopted into a hostile tribe, that he makes no difficulty of going to war against his former countrymen and kindred. (*Charlevoix, Canada* 162.)

The custom of considering the prisoners taken by an enemy as being dead, prevails among certain negroes of Africa, and Dr. Robertson (*Hist. Am.* i. note 75,) says, it was a maxim among the Romans in the early periods of the commonweath, that a prisoner "tum decessesse videtur cum captus est."

Deplorable as a captivity among the Indians may seem to the generality of persons, it is undoubtedly much less unhappy than is generally supposed, and perhaps to the lower classes of society, it might be deemed even preferable to the station they occupied in civilized life. Occurrences of this kind

* The Caraihs of the West India islands were cannibals, but they were certainly of Guiana origin.

† I do not consider the mere revengeful eating or tasting a morsel of the body of a slain enemy, sufficient to give a cannibal character to a people. Otherwise perhaps, every barbarian people of the world might come under this reproach. The term should be restricted to those who like the Brazilians, &c. made a feast on the human body.

have been frequently observed in the history of the European settlers in America, and the following relation is very positive in its inference. In one of the treaties made between the Indians and people of New England, the former promised to return such of the English as they held prisoners, *if they desired it*; but they refused to compel any who were inclined to remain with them; and many persons both male and female did remain, who mingled with the Indians. (*Hutchinson's Hist. Mass.* ii. 104.) The same thing is recorded by Colden, (*Hist. Five Nations*, 203,) Southey (*Hist. Braz.* iii. 391, 407,) relates, that in Brazil both men and women frequently prefer living with the Indians, to returning again to the society of the whites.

Where extermination of the weaker party has not taken place, or when they have not been driven out of the reach of the conquerors, peace ensues, either by the submission of the weaker, or by the mediation of a friendly nation, but more commonly by the adoption of the latter, into some nation or tribe who are at peace with their enemy. Du Pratz (*Hist. Louisiana*, ii. 156,) says, that among the Indians of Louisiana, if a nation of two thousand warriors, violently pursue another nation of five hundred warriors, if these last retire among a nation in alliance with the two thousand, and are adopted by them, the pursuing party immediately discontinue the war, and reckon their recent enemies as allies.

In concluding their treaties, there are but two circumstances sufficiently characteristic to merit description. These are the smoking of the calumet,* and the exchanging strings of beads, or as they are more commonly called, belts of wampum.

The calumet, which is a Norman word signifying a reed, is a tobacco pipe, whose stem is about four feet in length, sometimes round, and at other times flat. It is painted and adorned with hair, porcupine quills dyed of various colours, and the most beautiful feathers that can be procured. The bowl of the pipe is most frequently of red marble, though some tribes only admit it of white stone, and if it be presented to them either of a red or black colour, will have it whitened before they smoke it. There are also various peculiarities in the ornaments of the calumet, by which its particular nationality is recognised. It is considered a sacred or consecrated object, and on this account is never suffered to touch the ground, being laid upon two forked sticks, stuck upright in the earth for that purpose.

* The Calumet is smoked upon every important occasion, either in making a treaty, or in determining to go to war, &c.

Among those nations who use the pipe in concluding their treaties, the calumet confers personal inviolability on those who are carrying it. They are indeed in the sacred character of ambassadors, and as such are protected from harm even among the rudest nations.

The use of the calumet seems to have been confined to a certain part of North America, and chiefly to those countries adjacent to the Mississippi, but also well known as far as the shores of the Atlantic ocean. Beyond the Rocky mountains, it is very questionable whether it was used until recently, when their rare communications with the Indians on this side of that chain of mountains, may have made them acquainted with it in a partial manner. It is said, (*Robertson's Hist. Am.* ii. 41,) that when Behring and Tschirikow visited the North West Coast, that the nations there presented them with the calumet; but I am inclined to consider this a mistake, having never read any thing among the different navigators of those coasts, that could imply the use of such an emblem. Dr. R. has most probably confounded the calumet, with a custom observed by Capt. Cook at Snug Corner bay, (*Voy. N. Hem.* ii. 357.) He says, that the natives who came to see him, "held up sticks about three feet long, with large feathers or wings of birds tied to them." This custom, therefore, from whence soever it may have been derived, was not offering the calumet or pipe of peace.

The calumet was used by the demi-civilized Natchez, and the Indians west of the Mississippi, as far at least as the bay of St. Bernard, and probably to the frontiers of Mexico. But neither the Mexicans, nor any people to the south of them, appear to have used it in making their treaties.

The Canada Indians (*Charlevoix*, 135,) have a tradition, that the use of the calumet originated with the Pawnees of the Missouri, who received it from the sun. This tradition, as far as the Pawnees are concerned, seems strengthened by the Mandans and Minitarees relating the same thing of that people. (*Nuttal's Travels*, 276.) Du Pratz (*Hist. Louisiana*, i. 319,) says the calumet was used amongst the Natchez from time immemorial.

I am not certain but that the use of the calumet is a comparatively modern custom; not having found it described by any of the more early voyagers and travellers in America, such as Soto, Hudson, Herriot, and Smith, at any rate, not distinct enough to separate it from a simple act of hospitality.

But it is possible that the Portuguese gentleman (*page* 40,) describes the calumet, when he says, some Indians came to Soto "playing on a certain pipe, which serves for a signal

that they come as friends;" though his words seem rather to designate a musical instrument.

In the year 1679, Henepin speaks of the calumet as being in universal use among the Indians east of the Mississippi. It is not improbable, however, at that time, that the French traders had both greatly extended its use, and confirmed its character of conferring personal inviolability; as such a practice favoured their traffic into the interior parts of the country.

There is nothing in the eastern hemisphere analogous to the calumet, nor can such a conformity be expected, as the very use of tobacco and smoking has been derived from America.

If the calumet be smoked by the hostile parties, the preliminaries in European language are settled; and they enter into such treaties as their situation demands, or their policy requires. To ratify the league, belts of wampum are given, whose figures and marks, are intended to remind the parties of the terms to which they have acceded. There are no hieroglyphic figures delineated on the belt, but it is worked with peculiar marks and figures, which serve as a memento, that such a particular belt was given, when such a treaty was made. I know of nothing which can convey a better idea of the principle of the wampum belt, than by alluding to a rural custom which prevails in certain parts of Europe, where two lovers break a piece of money between them, which broken pieces, like wampum belts, remind the parties when absent, of their mutual engagements made at the time the coin was broken.

The wampum strictly so called, were simply blue and white beads, made for the most part from the inner coat of the clam shell, (*Venus Mercenaria*.) That bluish coloured part, vulgarly called the heart of the shell, furnished the violet or blue bead, which was the most esteemed.

To make the wampum belt, these beads were strung on sinews, and sewed to a leather belt or strap in rows, and the colours arranged into various devices and patterns.

The wampum was also used for ornamental purposes, and in this manner may have been worn by many tribes both of North and South America, but as employed in ratifying treaties, its use does not seem to have been quite as extensive as the calumet, unless we may consider the quippos of the Peruvians to be an improvement upon the practice, which is not altogether improbable. Under the head of Quippos, we shall notice some customs in the old world of analogous purpose, to which they bear a closer resemblance than to the wampum belt.

There seems to have been but little formality observed among the South American tribes, in concluding their treaties. Gumilla in one instance (*Hist. Orinoq.* ii. 91,) says, "they ratify (*scellent*) their treaties with sticks, which they give reciprocally."

The Araucanians (*Molina, Hist. Chili*, i. 119, 249,) carry in their hands when they conclude a peace, the branches of a tree regarded as sacred by them, which they present to each other. Stevenson, (*Trav. South America*, ii. 55, 105,) also takes notice of this practice among the Araucanians. It is I believe the only instance of an Indian tribe, using so natural and agreeable an emblem, in making a treaty of peace.

According to the plan we have laid down for investigating the history of the Indians of America, this chapter should terminate, with an exposition of what they relate concerning their first origin, and their traditional history. But we cannot more than allude to this subject as it concerns the barbarous tribes, from the inutility, as well as the impossibility of exhibiting in any reasonable compass, so great a mass of strange and whimsical accounts; as incoherent in their particulars, as the relation of a disturbed dream.

But though there is an almost endless variety in the traditions they relate concerning their origin, there is one particular incident of their history so universally stated by them that it would seem improper to omit stating it. I believe, that nearly every nation whether of North or South America, speak of a deluge of water that once overflowed the earth, destroying all mankind but some few individuals whom each tribe claim as their own particular progenitors.

The ancient history of the barbarous tribes, or of their migrations, are equally confused with those they relate concerning their origin, and in no instance can be presumed to extend back beyond a century of years, anterior to the immediate inquiries of the Europeans.

After a deliberate examination of their respective traditions of emigration, which are both vague and uncertain, I cannot consider them as throwing the least degree of light upon the history of their origin. They certainly only relate to the partial removals or emigrations of these people, from one to another part of the American continent. This belief is in strict conformity with every thing we know of their actual condition, when we first became acquainted with them. They were continually engaged in war with each

other, and according as they were fortunate or unsuccessful, they either enlarged their country, or abandoned it to be incorporated with an adjoining people; or else they in turn invaded another nation more or less distant, and dispossessed them of their country.

Every change of political circumstances, therefore, altered the limits of an Indian territory, which would in the course of a single century, leave but an indistinct impression on their minds, as to any former country from which they may have emigrated. A vague idea of a previous removal, might be retained by their oldest people, which they might state to be from some particular point of the compass: but beyond this, they seem to have retained no precise information.

In North America, the tribes between the Atlantic ocean and the Mississippi river, I believe universally stated, they had crossed that river from some westerly country, of which they preserved no remembrance. Of the traditionary history of the tribes between the Mississippi and the Rocky mountains, I have never seen any particular account, unless in the brief observation made in Long's Expedition to the Rocky Mountains, i. 339, which states they report they had in part emigrated from beyond the great lakes.

The Indians found by the Spaniards in Mexico and Guatemala, appear to have at different times proceeded from the north, and especially from that country west of the Rocky mountains. But there were also others in these regions, who remembered nothing of a previous emigration.

In South America, the demi-civilized nations, seem to have preserved no tradition of an emigration to the countries where they were first discovered by the Spaniards.

The barbarous Indians living in those regions watered by the Orinoco, the Amazon and the La Plata rivers, like those of North America, lived in a state of perpetual conflict with each other, and were therefore under the influence of the same causes, which have rendered the history of the former so confused and uncertain. All their histories of emigration amount to nothing more, than removes from one district to another of South America. It is perhaps a singular fact, that there appears to be no connexion between the history of the Indians of the two Americas.

The inhabitants of the West India islands, there can be no room to doubt, came from south to north. The great nations from whom they were descended, whether Arrowacks or Caribs, being yet known in South America.

CHAPTER IV.

OF THE NATCHEZ, AND OTHER INDIANS OF FLORIDA.

WE are now entering upon that second division of the aboriginal people of America, whom in the introduction to our subject, we distinguished by the term of demi-civilized: And it happens conveniently to our plan of arrangement, that the people with whose institutions we are to commence, were not only the first in that geographical order in which we have hitherto examined the American population, but they were perhaps, in the first, or lowest stage of that imperfect civilization, to which a few aboriginal nations had attained, previous to the voyage of Columbus.

At the time the Spaniards discovered the southern part of the United States now known as Florida, Louisiana, Mississippi, Alabama, and Georgia, there were certain nations inhabiting those states, who it is evident were advanced in their progress to civilization, beyond any of the adjoining Indian tribes. The narratives of the early travellers in these countries, meagre as they are, yet so explicitly declare this to have been the case with the Natchez, Tensas, Bayagoulas, &c. that some modern writers have not hesitated to declare their accounts were exaggerations, without just foundation. Such assertions are easily made, and in this instance have been made, without examining the various testimonies given by writers of different nations, who have either travelled through, or settled themselves in these parts of our country, at an early period of Europeo-American history.

It is true, that when we became more intimately acquainted with these people, for whom we claim a certain degree of demi-civilization, they were in an almost ruined state, from wars and other calamities, which had begun to subject their social institutions to decay, even before the time of European discovery. We find when Soto marched through the country, that the Cherokees and Chickasaws, were at that time bordering on, or established among them; and that a part of their land had been desolated by pestilence. (*Portuguese Gentleman*, 64.) The murderous invasion of that villain Spaniard, not only carried death and destruction wheresoever he directed his course, but in its consequences enabled their Indian enemies around, to take advantages of their weakness; from which they had not recovered, when

the French made their settlements in Louisiana. These last completed their ruin, by war, the communication of diseases, and the use of ardent spirits.

It was in their last declining condition, that we became acquainted with the people of Louisiana, through the medium of some French travellers, who visited that country about the commencement of the last century. They have given us a tolerable account of the Natchez, a tribe in immediate contact with their colony, and whom they considered as the ancient head of the demi-civilized people of Louisiana. From the history of that tribe chiefly, in connexion with occasional information of other tribes, we think we have plausible authority to infer the general state of society in that part of America, denominated Florida by the first discoverers.

We have been induced to retain the name of Florida as the title of the present chapter, from the difficulty of finding a common name, for the several nations of whom we shall speak. And as they were spread perhaps loosely, over four or five of our present southern states, an equal difficulty was felt, to distinguish their country under a common appellation. Under these circumstances of embarrassment, it has been thought advisable to continue the use of the name Florida, which was originally, though vaguely, applied by the Spaniards to that part of the United States lying between the ocean and the Appalachian mountains, and extending east and west, from about the Savannah river into the province of Texas.

That a state of society prevailed among the people of this part of North America, very different from that of any of their neighbours, is evident from the historians of Soto's expedition, who describe the houses of the natives to be like farm houses in Spain, and collected together into large towns. (*Port. Gent.* 46.) In other places they speak of dwellings with out houses, bake houses, granaries, &c.; shewing nations no longer in the hunter state, but attached to the soil, and with all the corresponding effects of a life less erratic than that of the more barbarous tribes. That we may give the best view of their actual state of society, we shall divide our subject into different heads, more or less analogous to those used when treating of the barbarous or savage tribes.

Of the State of Society, Arts, &c. among the Indians of Florida.

The general state of society and manners among the Natchez, and other nations inhabiting Florida, only differed in degree from the ruder tribes adjoining, and of whom we have discoursed in the preceding chapter. They procured a part of their subsistence from hunting and fishing, but agricultural arts were in much greater perfection, and more extensively pursued. They did not change their residence as other North American tribes, and therefore their houses, domestic implements, and furniture, were comparatively comfortable in their various uses. According to the plan we have laid down for investigating this subject, we shall in the first place describe their habitations.

"The huts of the Natchez," according to Du Pratz, (*Hist. Louisiana*, ii. 224,) "are nearly a perfect square, none less than fifteen feet, and some are thirty feet square. They erect these huts in the following manner; they bring from the woods many young trees about four inches in diameter, and thirteen or twenty feet in length, they plant the strongest of these in the four corners, and the others fifteen inches from each other, in straight lines, for the sides of the building. A pole is then laid horizontally along the sides on the inside, and all the poles are strongly fastened to it by split canes. Then the four corner poles are bent inwards, till they all meet in the centre, where they are strongly fastened together. The side poles are then bent in the same manner, and bound down to the others. They then make a mortar of mud mixed with Spanish beard, (*Tillandia usneoides*) with which they fill up all the chinks, leaving no opening but the door. The mud wall they cover both outside and inside with mats made of split cane. (*Arundo gigantea*.) The roof is thatched with turf and straw intermixed, and over all is laid a mat of canes, which is fastened to the tops of the walls by creeping plants. These huts will last twenty years, without material repairs."

This account is confirmed by Charlevoix. (*Canada*, 312.) Tonti (*Trans. N. York Hist. Soc.* ii. 235,) describes the Illinois Indians, adjacent to the Natchez, as having two apartments to their huts, and underneath a cellar for preserving their grain.

As the natives of Florida for the most part lived under a despotic government, it was but natural, that their chiefs should be lodged in a superior manner to their subjects. Garcilazo de la Vega (*Hist. de la Florida*, i. 217,) gives us the following relation, not only interesting to our present sub-

ject, but which throws a strong light upon the history of the numerous mounds, described by more modern travellers in this part of the United States.

"The town and house of the cacique of Ossachile are similar to those of all other caciques in Florida; and therefore that I need not give a particular description of each one as we meet them in the country, it seems best to give one description that will apply generally to all the capitals, and all the houses of the chiefs in Florida. I say, then, that the Indians endeavour to place their towns upon elevated places, but because such situations are rare in Florida, or that they find a difficulty in procuring suitable materials for building, they raise eminences* (mounds) in this manner. They choose a place to which they bring a quantity of earth, which they elevate into a kind of platform two or three pikes in height, (eighteen to twenty-five feet,) of which the flat top is capable of holding ten or twelve, fifteen or twenty houses, to lodge the cacique, his family, and suite. They trace around the foot of this mound a square place, conformable to the extent of the town they intend to build, and around this square, the more considerable people build their dwellings. The commonalty, (*petit peuple*) build around them in the same manner, and the whole population thus surround their chief. The mound upon which the cacique lives, has its sides made so steep, that it is impossible to ascend it but by the artificial steps or way, that is fixed alone on one side."

The habitation of the cacique, built upon the mound, was larger and more commodious than the huts of his people, but not otherwise materially different in construction. The Portuguese gentleman who accompanied Soto, (*page 52*,) describes the houses of the chiefs in certain parts of the present state of Alabama, to have had porticos to their doors.

Other particulars concerning the houses of the caciques, belong properly to their state or dignity, which we shall in a few pages more describe.

The temples of these people, were in like manner often built upon mounds, and the whole town was then surrounded with a wooden or earthen wall, sufficient to protect them against any Indian assault. These particulars, however, we shall speak of under their proper heads.

The furniture of the houses of the Florida Indians, corresponded with their superior construction. They had an equivalent for a bedstead, which was conveniently made, and

* The elevation of mounds for such purposes, is noted by the Port. Gent. 22, when he says, "the lord's house was near the shore, upon an eminence made purposely to serve for a fortress."

which the ruder tribes can hardly be said to have even attempted to construct. They also had wooden seats or stools, which were cut both seat and legs out of one block.

In the manufacture of earthenware, they may be considered tolerable artists, for they made "kettles of an extraordinary size, pitchers with small mouths, gallon bottles with long necks, pots or pitchers for bear oil, which would hold forty pints." (*Du Pratz Hist. Louis.* ii. 226.)

The Portuguese gentleman, (p. 178,) describes their earthenware to differ little from that made at Estremos or Montemor, in A. D. 1538.

Their other furniture consisted of mats, baskets and boxes, made of split cane and other materials, ingeniously wrought and ornamented.

Their tools were generally made from flints, bones, &c. like those of the barbarous tribes; though copper was to a limited degree applied to such purposes. The historians of Soto's invasion, (*Portug. Gent.* 75; *Herera, Hist. Amer.* v. 319,) describe copper axes or hatchets, pikes with copper heads, clubs, staves, &c. either entirely or in part made from copper.

They made salt near the banks of the Arkansas river, (*Du Pratz*, ii. 234,) from the water of saline springs, which they evaporated in earthen pans made for this purpose. In the account of Soto's expedition, (*Port. Gent.* 133, 164,) mention is frequently made of the manufacture of salt, which they formed into square cakes by means of earthen moulds.

The dress of the Florida Indians, was much the same with that used by the ruder tribes, whom they also resembled in wearing little else than the breech-cloth in warmer weather. In the colder seasons they wore skins prepared like chamois leather, buffalo robes cured with the wool or hair, &c. But they surpassed other Indians adjoining them, in the greater quantity of clothing made from wild hemp, the bark of the mulberry tree, and other plants with fibrous barks. Of this latter manufacture, *Du Pratz* (*Hist. Louisiana*, ii. 231,) gives us the following account: "They take the bark from the young mulberry shoots, and after beating it into fibres, bleach them by exposure to the dew. They then spin them about the size of pack thread, and weave them in the following manner; they plant two stakes in the ground about a yard and a half asunder, and having stretched a cord from the one to the other, they fasten their threads of bark double to this cord, and then interweave them in a curious manner into a cloak of about a yard square, with a wrought border round the edges."

The Portuguese gentleman, (pages 52, 64, and in other places,) notices this kind of clothing as being common among them. He also reports, that "a great many mantles made of white, red, green and blue feathers, very convenient for the winter," were found in certain deserted houses they fell in with on their march. Du Pratz (*Hist. Louisiana*, ii. 230,) also describes these feather mantles.

Some of their bark manufactures were made in pieces of considerable dimensions; Iberville (*Herriot, Hist. Canada*, i. 489,) takes notice of a sheet placed before a temple, which measured eleven feet in length, by eight in width.

They decorated their dresses with porcupine quills dyed of various colours and plaited together, as we have observed was the custom among the barbarous North American tribes. Their other ornaments also, were for the most part similar; the greatest difference perhaps, was that necklaces made of coarse pearls, were common in Florida.

Fans made from feathers, were used by the Natchez nobility.

Plates of copper wrought into various shapes, were used for ornaments; and occasionally pieces of silver coarsely beaten into shape, were met with by the earlier travellers. (*Hackluyt, Voy.* iii. 269.)

Though rather sceptical as to its truth, I have thought proper to introduce the following account from Purchas. (*Pilgrims*, iv. 1521.) In the expedition of Alvaro Nunez to Florida, A. D. 1533, one of the Indians gave the Spaniards "a thick and great bell of copper, with a visage engraven on it, which they said they had from their neighbours to the northward; wherefore we knew, that from what place soever it came, the art of melting and casting metals must needs be there. They also gave us many small plates of silver, and antimony made into a powder to paint with."

I have met with no account of bells having being made by any of these people, and am therefore not without a suspicion, that the Spanish leader had caused it to be given out he had procured it among the Indians, that he might enlist followers for the conquest of the country. Similar artifices were not uncommon on such occasions.

Du Pratz (*Hist. Louisiana*, ii. 110,) describes the Kansas Indians, employing dogs for transporting burthens; they drew their loads on a kind of sledge made of two poles. I have not met with a more ancient account of this practice, but as dogs were found in great numbers in Florida by Soto, (*Port. Gent.* 55, 56, 71,) and which he says, the natives did not eat, it may be perhaps inferred, they were used for draft and hunting.

Of the Agriculture and Subsistence of the Florida Indians.

The Natchez and other people of Florida cultivated around their habitations, maize, beans of several species, the large sunflower, (*helianthus*,) pumpkins, melons, and sweet potatoes. (*Du Pratz*, ii. 7.)

Du Pratz (*Hist. Louisiana*, i. 290,) relates, that the Natchez sowed a species of grain which they called *chouprichoul* upon the shores of the Mississippi river. This grain, which I cannot recognize by his description, is said to be "the same as the *belle dame sauvage* which grows in all countries."

He also mentions another kind of grain, called *Widlogouil*, which we may infer was cultivated by them; though he gives no other description of it, than that it is shelled like rice. (*Hist. Louisiana*, ii. 239.) It is most probably that grain called by Stoddard, (*Sketches of Louisiana*, 124,) "wild oats," of which the present Indian races there frequently make bread.*

Bartram (*Travels*, 38,) found around the ancient monuments of Georgia and Alabama, certain fruit trees, under such circumstances as to justify his opinion they had been planted by the former population of the country. These trees are the persimon, (*diospyros*,) honey locust, (*gleditsia*,) Chickasaw plum, (*prunus*,) mulberry, (*morus*,) black walnut, shell bark, (*juglans*, &c.)

Like the barbarous tribes around, they hunted and fished when an opportunity offered, and they buccaneered their meat to preserve it. (*Du Pratz Hist. Louisiana*, ii. 240.) We have already described this process when speaking of pemican; under which name, this dried meat was known among the more northern nations.

The Port. Gent. page 72, says on one occasion, that Soto's troops met with a pot of honey, though neither before nor after did they see bees or honey.

Some of the Florida nations on the coast, are reported to have eaten occasionally a kind of unctuous earth. (*Robertson's Hist. Am.* ii. 452.) We have in page 78, given a short view of this practice, which has been observed among various people of either hemisphere.

None of the people of Florida appear to have used intoxicating drinks: but they made a hot tea from the leaves of

* Romans, (*Hist. Florida*, 84, 122,) at a comparatively late period says, the Florida Indians cultivated two varieties of that species of *Panicum* called Guinea corn. It is very possible, these are the two species of grain to which Du Pratz alludes.

the cassine, (*pinos glaber*), which they poured backwards and forwards until it frothed. This tea may have been slightly stimulant, but seems to have had no other than a diaphoretic or diuretic effect. (*Hackluyt, Voy. iii. 327. Charlevoix, Canada, 342.*)

They smoked tobacco, and danced to the same kinds of musical instruments which we have described in page 90. But the women here were allowed to dance in circles among themselves, surrounded by larger circles of men.

They also played that masculine game of ball we have described in page 86, and the game of chungké mentioned in page 87, and which perhaps had its origin among these people, or a kindred tribe.

Besides these games, they had the more sedentary ones of the platter or dish, and of the fifty or seventy sticks; see page 88.

Any other particulars of their amusements, will be found in our account of their religious festivals.

Of the Government and Polity of the Florida Nations.

What especially distinguished the people of Florida from the ruder tribes of North America, was the despotic government under which they lived; and which is very striking to a citizen of the United States, from its contrast with the institutions of the bold and independent nations of the Delaware or Iroquois stocks.

As previously stated, we have been obliged to compile our account of these people, from histories of different nations of this part of America, which agreeing in general conformity, when insulated particulars are afforded for comparison, we are thereby enabled, with some plausibility, to infer that one general form of institution and polity, was common to the country. The most detailed account of their form of government, we learn from Du Pratz. (*Hist. Louisiana.*) In various parts of his work he informs us, that the nation of the Natchez was divided into nobles, and common people, which last by an arrogance not peculiar to a savage nobility, were called "Stinkards;" a phrase expressively analogous to "swinish multitude." These common people were to the last degree submissive to the nobility, who were divided among themselves into suns, nobles, and men of rank.

The SUNS were the descendants of a man and woman, who according to their traditions, came down from the sun, to teach them how to live and govern themselves. One part of this divine man's code, was, that his descendants

called after their celestial ancestors, SUNS, should always be distinguished from the bulk of the people, and that none of them should be ever put to death upon any account whatsoever.

The nobility of this privileged class, was also ordained to be transmitted by the female line; and though the children whether male or female, bore the name of SUNS, and were regarded as such, the males enjoyed this honour in their own persons alone; for their male children had only the title of nobles, the next generation lowered them to men of rank, and the third in descent became plain Stinkards. Distinguished actions, especially of a military nature, might retard the gradual deterioration of blood; but as the "good and great" were only counted, the progress to the Stinkard class, was I presume very regular, if we may be permitted to estimate it by the history of nobility in other countries.

The case was very different, however, with the female posterity of the SUNS; for they continued through all generations, to enjoy the privileges of their rank. (*Du Pratz, Hist. Louisiana, ii. 203.*)

The reason for making rank hereditary in the female line, is said by Charlevoix, (*Hist. Canada, 318,*) to have been founded in the licentious conduct of the women. The men said, it was impossible to say who was the father of their offspring, but that the children of princesses, were at any rate one half noble blood, be the father whom he may.

We must observe here, though a little out of place, that the male and female nobility never intermarried; for as one of their laws which we have already noticed, prohibited their being put to death upon any account whatever, so they had another law of equal authority, which required the conjugal partners of the SUNS, to be put to death at the time of their burial. To fulfil these two celestial ordinances, they therefore only married Stinkards. The law was thus rendered consistent, and their privileges were undiminished.

The history of the founder of the polity of the Natchez, is thus related by Du Pratz (*Hist. Louisiana, ii. 175,*) according to their tradition.

"A great number of years ago, there appeared among us a man and his wife who came down from the sun. Not that we believe the sun had a wife who bore him children, or that these persons were their descendants. But when they first appeared among us, they were so bright and luminous, that we had no difficulty to believe that they came down from the sun. This man told us, that having seen from on high that we did not govern ourselves well, that we had no master,

that each of us had presumption enough to think himself capable of governing others, while he could not even conduct himself, he had thought fit to come down among us, to teach us to live better."

The Natchez, with some difficulty, as is usual upon similar occasions, prevailed upon this disinterested man, whose name is unrecorded, to accept a regal sway over their nation. He then established that arbitrary and despotic government, by which they were ruled when first visited by the French travellers; and whose chief features were, unbounded indulgence to his descendants or the nobles, and unbounded servitude to the common people. He also regulated their religious system; by which the GREAT SUN was made its head or chief minister, thus uniting the temporal and ecclesiastical power in one person.

This divine personage gave them some very good moral regulations; (*Du Pratz Hist. Louisiana*, ii. 176,) and among other matters, forbid incestuous marriages, even among the nobility, which shews different views from Manco Capac, also a son of the sun, who favoured the Peruvians with a celestial visitation.

The nation of the Natchez consisted of numerous villages, each of which was governed by its own sun or chief. These admitted their inferiority to one great chief, who was considered the head of the nation; and as they bore the name of suns, he was styled the GREAT SUN. He had the power of life and death over his subjects, and could command their services without making them any compensation. (*Charlevoix Hist. Canada*, 315.) Du Pratz (*Hist. Louisiana*, ii. 184,) says, "the authority which their princes exercise over them is absolutely despotic, and can be compared to nothing but that of the first Ottoman emperors. Like them, the GREAT SUN is absolute master of the lives and estates of his subjects, which he disposes of at pleasure; his will being the only law, &c. But however absolute the authority of the Great Sun may be, and although a number of warriors and others attach themselves to him, to serve him, to follow him wherever he goes, and to hunt for him, yet he raises no stated impositions," &c.

The Tensas, according to Tonti, (*N. York Hist. Col.* ii. 272,) lived under a similar polity. "This people were entirely governed by their prince's absolute will. They recognised his children as his lawful successors, and when their chief died, they put his wife, steward, and twenty men of the nation to death to wait upon him in the other world. During his life no man drank out of his cup, or eat from his dish, or walked as he was passing by," &c.

The retainers or domestics of the GREAT SUN of the Natchez, it is said (*Herriot, Hist. Canada*, 508,) were embodied after a plan, which was established by the ancient kings of Egypt. (*Diod. Sic. lib. 1, chap. 4.*) For as soon as his presumptive heir was born, every family in which there was a child at the breast, gave that child to his service. Out of the whole thus given, a certain number were chosen to serve the young prince; and who at competent ages received employments suitable to their capacities. Some spent their lives in hunting or fishing for the service of his table, others were employed in cultivating the ground, and others as followers or personal attendants. When the chief died, all these individuals were put to death, to serve their master in the world of spirits.

The Great Sun (*Charlevoix, Canada*, 318,) had several officers acting under him in the following capacities: Two war chiefs, two masters of ceremonies for their temple rites, two officers who presided at councils, when strangers came to treat with the Sun; four officers who directed their national festivals, and some others who superintended the public works. All these ministers of the will of the Great Sun, were respected and obeyed in the same manner as if he himself had given the orders in person.

We have in a former page described the habitations of the Florida chiefs, and remarked that they were built upon artificial mounds. We shall now complete that relation, by describing the etiquette of their levees, as related by Herriot (*Hist. Canada*, 505,) concerning that of the GREAT SUN of the Natchez. "The cabin of the Great Sun contained several beds on the left of the entrance; on the right hand was the bed of the Great Sun adorned with different painted figures. This bed consisted only of a palliass made from canes and reeds, with a square piece of wood for a pillow. In the centre of the cabin was a small boundary, around which every one that entered the apartment, was obliged to perform the circuit, before he was permitted to approach the bed. Those who entered, saluted with a kind of howl, and advanced to the extremity of the cabin, without casting their eyes towards the side where the Great Sun was seated. They afterwards gave a second salute, by lifting their arms above their heads, and howling three times. If they were persons whom the Great Sun respected, he answered by a faint sigh, and made them a sign to be seated; he was thanked for his courtesy by a new howl, and at every question that the Sun made, they howled once before they returned an answer, and when they took leave of him, they drew out one continued howl until they retired from his presence."

The state of the Tænsa chiefs was very similar; (*Tonti, N. York Hist. Coll.* ii. 269,) but the furniture of their dwellings was much superior to that described above. Instead of howling, their subjects made their obeisance by a "loud kind of humming," which they assured Tonti was their token of admiration and respect.

In the account of Soto's invasion, it is mentioned several times, that the caciques of Florida were attended with some rude state. Thus the chief of Cosa (*Port. Gent.* 79,) who visited Soto, was carried in a litter upon the shoulders of his subjects, while attendants around him, "sung and played upon instruments." On his head he wore a kind of diadem made of feathers.

The cacique of Tascalusa, (*Port. Gent.* 85,) received the Spaniards, sitting on a carpet and cushions, spread on the ground before his habitation. His nobility were seated a little distance from him, and to protect him from the rays of the sun, one of them held an umbrella over his head, made of party coloured buckskin.

In the dwelling of the cacique of Palisema on the west side of the Mississippi, the inner apartment was hung with buckskins so well dried and wrought, (*Port. Gent.* 131) "that one would have taken them for good tapestry; the floor being also covered with the same."

As we have shewn that women enjoyed certain hereditary dignities even among the barbarous tribes, we may readily believe that among the Floridans, where the noble females had such great privileges, they would often be at the head of tribes, and chiefs of villages. The Portuguese gentleman (*pages* 49, 63,) relates, that Soto met with several female caciques, one of whom was carried on a kind of litter by four men; and her canoe had an awning in the stern, with a carpet and cushions to sit on.

Laudoniere (*Hackluyt*, iii. 339, 344) speaks of a queen, who was much revered by her subjects, when he visited Florida.

Of the Religion of the Florida Indians.

The Natchez believed mankind to be immortal, and that after death their souls went to reside in another world, where they were rewarded or punished, according to their conduct in the present life. Such as had been faithful observers of the laws, were to be conducted to a region of happiness where the most exquisite viands would be supplied them in abundance; that their days would pass in pleasure and tran-

quillity, in the midst of feasts, of dances, and of women; and that they should enjoy every imaginable pleasure.

On the other hand, it was supposed that the transgressors of the laws, would be cast upon lands unfertile and marshy, which would produce no kind of grain. There they should be exposed naked to musquetoos, that all nations should make war against them, and that they never should eat but of the flesh of alligators, and the worst species of fish.

The Natchez and other Indians of Louisiana recognised a supreme and all ruling being, who governed the universe, and who was called the Great Spirit. They also believed there was a great evil spirit, who, however, was of inferior power to the good spirit, and that numerous inferior or subordinate spirits, both good and bad, were in continual operation around them. (*Du Pratz, Hist. Louisa.* ii. 173, 208.)

Like the barbarous nations, (*Du Pratz*, ii. 208,) they paid no homage to the Good Spirit, but endeavoured to propitiate the evil principle, who, according to their mythology, governed the seasons, and all that may hurt or benefit the productions of the earth.

The sun however appears to have been the principal object of their veneration, for as they could imagine nothing superior to that luminary, it was supposed to be especially worthy of their religious homage. To its honor a perpetual fire was maintained in their temples. The GREAT SUN, who was considered a brother of the Sun, honoured the appearance of his elder brother every morning, as soon as he appeared above the horizon, by a repeated howling; and having had his pipe lighted, he offered him the three first mouthfuls of the smoke; then raising his hands above his head, he turned from east to west, in the course the sun would move during the day.

It is not certain that the Natchez made any idolatrous representations, though wooden figures of men were observed in their temples at the time of Soto's invasion. Garcilazo de la Vega, i. 429, describes certain figures placed at the entrance of a temple, which seem to have represented guardians to the sanctuary. But as his narration is evidently grossly exaggerated, we shall not notice the account any further than as above mentioned. The fact may serve to explain the origin of some wooden statues that have been observed among the Creeks, (*Adair*, 22,) and which in all probability were derived from some of the ancient Florida nations.

Du Pratz (*Hist. Louisiana*, ii. 178,) relates, from the tradition of the Natchez, the following history of the institution of the perpetual fire, so religiously preserved by that people. The celebrated Incognito, that in a preceding page we in-

formed our readers, came down from the sun to teach the Natchez how they should be governed; is reported to have told them, "that in order to preserve the excellent precepts he had given them, it was necessary to build a temple, into which it should be lawful for none but the princes or princesses to enter, to speak to the spirit. That in the temple they should eternally preserve a fire, which he would bring down from the sun, from whence he himself had descended. That the wood with which the fire was supplied, should be pure wood without bark.* That eight wise men of the nation, under the superintendence of a chief person, should be chosen to guard the fire night and day, and that if any of them neglected their duties, they should be put to death," &c.

Du Pratz also observes, that the Natchez made neither sacrifices, libations, nor offerings; their whole worship consisted in preserving their eternal fire. Charlevoix (*Hist. Canada*, 319,) however says, that the first fruits of every thing they gather, is brought to the temple, and that no land was sown, until the seed had been presented there.

The Natchez had certainly advanced very far towards having an order of priests; for according to Du Pratz, ii. 212, besides the eight guardians of the sacred fire, two of whom were always on the watch, there also belonged to the service of the temple, a master of ceremonies, who was also master of the mysteries, since according to them he conversed very familiarly with the spirit. Above all these persons was the *Great Sun*, who was at the same time chief priest, and sovereign of the nation. Yet as he says, there were no offerings, libations, or sacrifices made, these different persons cannot be considered priests.

Like the ruder tribes, they had conjurors among them, (*Du Pratz, Hist. Louisiana*, ii. 208,) who no doubt practised the same feats as those of the barbarous tribes.

The temple of the Natchez, in which their perpetual fire was maintained, is thus described by Du Pratz. (*Hist. Louisiana*, ii. 221.) "The temple is about thirty feet square, and stands upon an artificial mound about eight feet high. The mound slopes insensibly from the main front which is northward; but on the other sides, it is somewhat steeper. The four corners of the temple consist of four posts, about a foot and a half in diameter, and ten feet high, made of the cypress tree, which is incorruptible. The side posts were

* Perpetual fires were maintained as religious objects by the ancient Scandinavians, Greeks, Persians, &c. The last also resembled the Natchez, in using wood deprived of the bark; "ligna decortica." (*Hyde de Religio. Vet. Pers.* 19, 351.)

of the same wood, but only about a foot square, and the walls of mud about nine inches thick. The inner space is divided from east to west, into two apartments, one of which is twice as large as the other. In the largest apartment, the eternal fire is kept; and there is likewise in this place, a table about four feet high, six long, and two broad. Upon this table lie the bones of the late Great Sun, in a coffin of canes, very neatly made. In the smaller apartment which is very dark, as it receives no light but from the door communicating between the two rooms; I could meet with nothing but two boards, on which were placed some things like small toys, which I had not light enough to examine. The roof is in the form of a pavilion, and very neat both within and without; and on the top of it, are placed three wooden birds twice as large as a goose, with their heads turned to the east. Before the doors of the temples, throughout Louisiana, two posts are placed, formed like the ancient Terminii, that is, having the upper part cut into the shape of a man's head."

We have abundant evidence from different travellers, to state, that a perpetual fire was maintained among various other nations of Florida; and Charlevoix, (*Hist. Canada*, 323,) seems to consider, that the Maubiliens had a claim to some pre-eminence among them in this particular, for the other nations rekindled their fires at this temple, when they had become extinguished by accident or neglect. The nations of Florida, however, were almost entirely ruined in his day; for he observes that the Natchez were almost the only people, who kept a fire perpetually burning.

From the preceding relation of Du Pratz, we have additional light thrown on the history of the ancient mounds of this part of the United States, of which Bartram, in various parts of his travels, has made frequent mention.

Of the Division of Time, Festivals, &c., among the Indians of Florida.

The Natchez divided the year like the ruder tribes of America, into moons or months; of which thirteen appear to have made the annual cycle. These months derived their names from the fruits which were then in season, or from the animals usually hunted at those periods. Du Pratz, (*Hist. Louisiana*, ii. 185,) says, their year commenced with the month of March, which we are disposed to think correct, as this month is really the first which manifests the return of spring.

At every new moon, they celebrated a festival significant

of the fruit or grain in season, or of the animal which it was usual to see or hunt at such times. But as these festivals were of simple local history, and of a nature involving particulars no wise interesting, we do not think it necessary to describe any of them but the one which was considered their principal feast, and which may serve to impart a general idea of their state of society.

This festival was celebrated in their seventh month, called by them the maize moon; and consisted in their eating in common of new corn, (*zea mays*,) which had been expressly planted for this solemnity. This corn (*Du Pratz's History Louisiana*, ii. 189,) is sown upon a spot of ground never before cultivated, and by warriors alone; who sow, weed, reap, and gather the crop. When the corn is nearly ripe, the warriors fix on a place proper for the feast; and close adjoining to it, they form a granary from canes, which they fill with the corn, and then notify the GREAT SUN, who appoints the day for the general feast. Some days before the feast, they build huts for the GREAT SUN, and for all the other families round the granary; that of the GREAT SUN being raised upon a mound of earth two feet high. On the appointed day, the whole nation set out at sun rising from their village, leaving behind alone the aged and infirm, with a few warriors who are to carry the GREAT SUN in his litter. About nine o'clock he leaves the village in all the insignia of his dignity, and is carried to the granary amid shouts of joy resounding on all sides, and after being carried around the whole place, he alights and seats himself upon a seat or throne prepared for him.

Immediately after his arrival, they light a fire by rubbing two pieces of wood together; and when every thing is prepared for dressing the corn, the war chief, accompanied by the warriors belonging to each family, presents himself before the throne and addresses the GREAT SUN. He then rises up, bows towards the four quarters of the world, and advancing to the granary, lifts his eyes and hands to heaven and says; "give us corn;" upon which the great war chief, the princes and princesses, and all the men, thank him by pronouncing the word *hoo*. The corn is then distributed to the women, who run with it to their huts, and dress it with the utmost despatch. When the corn is dressed in all the huts, a plate of it is put into the hands of the Great Sun, who presents it to the four quarters of the world, and then says to the war chief, *eat*: Upon this signal, the warriors begin to eat in all the huts; after them the boys of whatever age, and last of all the women. When they have finished their re-

past, the warriors form themselves into two choirs before the huts, and sing war songs for half an hour; after which, they recount in succession their exploits, and the number of enemies they have slain.

The solemnity for the day, is concluded with a general dance by torch-light; which indeed lasts all night without intermission; for new performers successively take the places of those who become fatigued.

The next day the men amuse themselves with playing ball, the same game described in our account of the amusements of the barbarous tribes: and the night is spent in dancing. This manner of feasting and rejoicing, continues as long as any of the corn remains; after which the GREAT SUN is carried back on his litter, and the whole population return to their village.

The festivals thus celebrated in the village of the GREAT SUN, were celebrated in like manner in all the villages of the nation, which were governed by a *Sun*.

Of the Marriages of the Florida Indians.

It is barely necessary to observe, that the marriages of the Natchez and other Florida Indians, were consummated with little or no ceremony. A man among them might have as many wives as he could support, there being no restriction by custom of the country. And whenever the parties became dissatisfied with each other, they separated and married with others of more congenial dispositions.

The unmarried women among the Natchez, were unusually unchaste; (*Charlevoix, Canada*, 317,) but like the ruder tribes, when they married they lost the privilege of disposing of their favours without the permission of their husbands.

Owing to the despotism of their government, and some cruel customs established among them, which we have noticed in a preceding page, the princesses, or *Female Suns*, enjoyed high and distinguished privileges in contracting matrimony. As they never married with men of their own rank, they selected a husband from among the Stinkard class, whom they again divorced when they pleased. But this, I presume, was seldom done, for the law permitted them to have as many gallants as they pleased. (*Charlevoix, Canada*, 318.) Against these the legal husband was not permitted to express the least dissatisfaction. The poor *cornuto* stood up always in the presence of his wife, was not permitted to eat with her, and in fact was treated as a menial. If he was unfaithful, his wife might have him put

to death; and when she died, he was strangled that he might serve her in the world of spirits. All the advantage he derived from his marriage, was an exemption from work.

This custom, so strange even among American savages, is not unknown in the island of Java. Crawfurd, (*Indian Archip.* ii. 332,) says, "the daughters of Javanese princesses when married to subjects, assume a tone, and insist upon privileges, unknown to their sex in the eastern world. The husband in such cases frequently terms his wife *mistress*, addresses her in language appropriated to ceremony, and cannot marry a second wife or keep a concubine."

Something of the same kind is observed of the noble negroes of Congo. (*Malte-Brun, Geog. book 69.*)

Burial of the Dead.

The Natchez disposed of their dead, for the most part, in a manner we described as being practised among certain of the barbarous tribes. They exposed the corpse on a covered stage or elevated bier, until by putrefaction the bones alone remained. The skeleton was then carried to one of their temples in a cane basket, and preserved there until a sufficient number had been collected together. They were then committed to the earth in a common grave, as is the present custom in this country.

When any of the SUNS died, a great number of persons were put to death by strangling, and especially the wife or husband of the deceased, who we have previously remarked was always a Stinkard.

This custom of putting persons to death at the funerals of the great, was remarked in Soto's time. (*Port. Gent.* 159.)

The bones of the retainers and domestics that had been thus strangled, after being deprived of the flesh by the process of putrefaction as described above, were, when dried, put in baskets, and placed in the temple together with those of the SUN for whose service in the future world, they had been thus murdered. So abject indeed were these people, that the historians of Louisiana inform us, that the miserable creatures who were put to death on these occasions, generally thought it an especial privilege, and went to the place of their execution singing and dancing. Even women with children at the breast, would deliver their infants to a nurse, and die when their prescribed time had arrived, though their peculiar situation exempted them from this untimely death. (*Charlevoix, Canada*, 316; *Du Pratz, Hist. Louisiana*, ii. 214.)

Of War and Peace, among the Florida Indians.

Though the government of the Natchez was apparently a pure despotism, yet on some occasions the people exercised a certain power which we cannot well define. This appears from the fact, that the oldest and bravest warriors hold the council of war, at which though the GREAT SUN presided, he took no part in the debate, and the war chief who stated the motives for war to the council, after making his exposition, was only a spectator of the proceedings of others, who decide upon the course they will pursue.

The formalities used in declaring war or making peace, appear to differ very inconsiderably from the customs of the barbarous North American tribes, as already described; and the war itself, was carried on in the same skirmishing manner. They scalped the slain, burned, and otherwise tortured their prisoners, with every aggravation of cruelty.

Their weapons were in no respect different from those of the adjoining tribes. In one particular they approached the customs of European warfare, by making use of military drums. (*Port. Gent.* 101.)

The calumet was in use among them, and as fully respected as it was by the adjoining nations. Du Pratz (*Hist. Louisiana*, i. 319,) says, its use was of immemorial antiquity with the Natchez. But I have met with no account of it in the histories of Soto's invasion. Henepin, A. D. 1679, (*Acct. of La Salle's Expedition*, 74,) is the earliest writer, to my knowledge, who notes its use in this part of America.

The Natchez and other nations of Florida, surrounded their villages with palisadoes of great size, to protect them from the assaults or surprisals of their enemies.

Some of their towns were observed in the time of Soto's invasion, (*Port. Gent.* 83,) to be protected by "great stakes driven deep into the ground, with poles of the bigness of one's arm cross ways, both inside and out, which were fastened with pins, to knit all the work together, and which was about the height of a lance."

Other towns were much more strongly fortified, as is related by Herrera, (*Hist. America*, v. 324,) in his account of Soto's expedition. "The town of Mabila or Mavila, consisted of eighty houses seated in a plain, enclosed with piles drove down, and timbers athwart, rammed with long straw and earth between the hollow spaces, so that it looked like a wall smoothed with a trowel, and at every eighty paces was a tower,* where eight men could fight, with many loop holes,

* I presume this defensive wall was composed partly of palisadoes and partly of earthen mounds, which being elevated a little above the regular wall, impressed the Spaniards with the idea, that they were towers. And indeed they answered that purpose.

and two gates. In the midst of the town was a large square." Capaha, (*Herrera*, v. 336,) "was fortified with a ditch forty fathom* wide and ten deep, full of water, conveyed to it by a canal from the great river, being three leagues distant. The ditch enclosed three parts of the town; the fourth being secured with high and thick palisadoes. The natives retreated from hence to a fortified island in the great river."

That nothing may be wanting to establish these facts, to which we shall again recur in another chapter of our work, we shall add the following account from Du Pratz. (*Hist. Louisiana*, ii. 251.) "When a nation is too weak to defend itself in the field, they endeavour to protect themselves by a fort. This fort is built circularly, of two rows of large logs of wood; the logs of the inner row being opposite to the joinings of the logs of the outer row. These logs are about fifteen feet long, five feet of which are sunk in the ground: the outer logs are about two feet thick, and the inner about half as much. At every forty paces along this wall, a circular tower juts out, and at the entrance of the fort, which is always next to the river, the two ends of the wall pass beyond each other, and leave a side opening. In the middle of the fort, stands a tree with its branches lopt off within six or eight inches of the trunk, and this serves for a watch tower, &c. But notwithstanding all these precautions for defence, if the besieged are but hindered from coming out to water, they are soon obliged to surrender."

Du Pratz (*Hist. Louisiana*, i. 154, 156, 159,) mentions, forts built by the Natchez to protect themselves against the French; and one by the Chickasaws, (*page* 169,) to whom the Natchez fled after the destruction of their country. This was made "of trees two feet thick, placed like palisadoes, and their joinings lined with other posts almost as large. They also had formed a gallery of flat palisadoes quite round their fort, which were covered with earth to protect themselves from the grenades." This fort withstood an attack of the French, and who finally raised the siege, leaving their dead exposed to the brutal insults of the enemy.

Traditional History of the Natchez.

We have hitherto spoken of the nations of Florida in general, as we had parts of their institutions presented to us in the relations of various travellers, that justified the belief, that they pretty closely resembled those of the Natchez. But in the present section our research is exclusively con-

* Forty fathom must be a mistake, if the ditch is to be supposed of artificial construction.

fined to the latter people, for I am not aware of any account, that records the ancient history of any other nation of Florida.

According to Du Pratz, (*Hist. Louisiana*, ii. 110,) the historical tradition of the Natchez was this, "before we came into this land, we lived yonder under the sun; (here the re-later pointed nearly south-west, towards Mexico,) we lived in a fine country where the earth is always pleasant; there our SUN's had their abode, and our nation maintained itself for a long time against the ancients of the country, who conquered some of our villages in the plains, but never could force us from the mountains. Our nation extended itself along the great water, where the large river loses itself; but as our enemies were become very numerous and very wicked, our SUN's sent some of their subjects, who lived near this river, to examine whether we could retire into the country, through which it flowed. The country on the east side of the river, being found extremely pleasant, the GREAT SUN, upon the return of those who had examined it, ordered all his subjects who lived in the plains, and who still defended themselves against the ancients of the country, to remove into this land; here to build a temple, and to preserve the eternal fire.

"A great part of our nation accordingly settled here, where they lived in peace and abundance for several generations. The GREAT SUN and those who remained with him, were tempted to continue where they were, by the pleasantness of the country, which was very warm, and by the weakness of their enemies, who had fallen into civil dissensions, &c.

"It was not till after many generations, that the GREAT SUN came and joined us in this country, and reported, that warriors of fire, who made the earth to tremble, had arrived in our old country, and having entered into an alliance with our brethren, conquered our ancient enemies, but attempting afterwards to make slaves of our SUNs, they, rather than submit to them, left our brethren who refused to follow them, and came hither attended only with their slaves."

Their tradition according to Du Pratz (*Hist. Louisa*. ii. 146,) also says, "that their empire after their removal to Louisiana, in the height of their prosperity, extended from the river Manchac or Iberville to the Ohio;* or about four hundred leagues; and that they had about five hundred SUNs or princes to rule over the nation."

* In Du Pratz, this river is called the Wabash, which was the name by which the Ohio was originally distinguished; but that the Ohio is the one signified, see Du Pratz, i. 299, 300.

At the time that we become acquainted with the Natchez, their empire was nearly destroyed, though we do not exactly know from what causes. Du Pratz conjectures, their ruin was in great measure occasioned by their bloody customs at the funerals of their SUNS. But it is most probable, that their empire, as he calls it, was nothing more than a loose confederacy of themselves, and some other demi-civilized people in this part of America; at the head of which the Natchez may have been, or at least, which their arrogance may have led them to assume.

But the more likely cause of the destruction of this nation, is to be found in their wars with the barbarous Indians adjoining them, and who were at least pressing on them around in every direction but from that of the sea coast. We also know that the Spaniards, in A. D. 1543, under Soto, had been for two or three years ravaging the country with fire and sword, treating the unhappy population as beasts of burthen, and of whom multitudes died from excessive fatigue, hunger and ill treatment. The inevitable consequence of this ferocious invasion, was an inability to defend themselves against the ruder tribes around;* who probably broke into their country in all directions, and smothered the partial civilization, which anciently distinguished this part of the United States.

On the arrival of the French in Louisiana, a few insulated portions only of the ancient Florida confederation, manifested any superiority to the adjoining barbarians; and the settlement of a French colony there, consummated the ruin of these demi-civilized people. In addition to the havoc occasioned by the introduction of the small pox, and the use of distilled spirits, the French and their Indian allies, carried on bloody wars against them under various pretexts. Finally, the Natchez of whom we have spoken so much in this chapter, were expelled their ancient country in A. D. 1730; a part being driven across the Mississippi, and the few others that remained, incorporated themselves with the Chickasaws and other neighbouring Indian tribes, and the new

* Dr. Barton, (*New Views*, xlvii.) says, "the Creeks appear to have crossed the Mississippi about the time the Spaniards under the command of Soto first landed in Florida. Their tradition informs us, that when they were moving downwards, they received intelligence concerning certain men of a different colour from themselves, who had hair all over their bodies, and carried thunder and lightning in their hands."

The Dr. informs us his information was derived from Mr. McGilwray, who I believe, was either a Creek chief, or else an interpreter to the nation, and of considerable reputation at that time.

confederacy of the Creeks or Moscogulges, arose upon their ruins.* (*Bartram's Travels*, 465.)

The traditional history of the Natchez, as related by Du Pratz, contains matter interesting to the American antiquarian in several particulars. Though we consider oral tradition to be of little authority, we can still admit that these accounts were originally true, but to have been materially perplexed in being handed down from one generation to another; who having no means of ascertaining or correcting their chronology, frequently blend together events, that have been separated by an interval of many centuries.

If we were to assume the time when the GREAT SUN rejoined that part of the Natchez, who were settled in Louisiana, to have been A. D. 1540, when the Spaniards under Coronado, made an incursion into the northern parts of New Mexico in search of Cibola; we should still be unable to estimate the previous time, when the nation first arrived in Louisiana: for their tradition dates their emigration "many generations" anterior to the arrival of the GREAT SUN. This expression in Indian traditions, is equivalent to any unknown period of time.

From the traditions reported by Du Pratz, it would seem, that they came originally from the northern parts of Mexico, which is not at all unlikely, as there are certain historical facts that strengthen the supposition.

The traditions, given by the Natchez to Du Pratz, (*Hist. Louisiana*, ii. 113,) relate, that their ancient enemies, by whom they had been compelled to emigrate to Louisiana, "lived in a great number of large and small villages, which were built of stone, and in which there were houses large enough to lodge a whole village. Their temples were built with great labour and art, and they made beautiful works of all kinds of materials."

We have already shown, that the Natchez in this ancient country, lived partly in the plains and partly in the mountains adjoining these people. If we can therefore discover any country to the south west, or rather west of Louisiana, that will answer to the demi-civilized state described in the tradition, we may with some plausibility point out the place of their ancient country. And their tradition, I consider the more entitled to credit, as it is within a few years only,

* Adair, (*Hist. Am. Inds.* 257, 267,) mentions the incorporation of some of the Natchez, and six or seven other reduced tribes, into the Creek or Muscogee confederacy; to which adoptions, he refers the great power and force of that nation. It is from this cause no doubt, that many ancient practices of the demi-civilized people of Florida, may yet be observed in the institutions of the Creeks.

that the early accounts of civilization observed in these regions by the Spaniards, have ceased to be considered gross exaggerations.

In A. D. 1530, Nuno di Gusman (*Purchas Pilgrims*, iv. 1559,) made an incursion of some distance into the northern parts of New Spain, though we cannot ascertain how far he went. In this expedition, he speaks of palaces of stone, statues of men like those of the Mexicans, a strong place of stone, &c.

Herrera (*Hist. America*, vi. 306,) mentions, that "as far as the Spaniards have penetrated into the northern parts of New Spain, they have found the remains of large towns, and of the land having been well cultivated, which is entirely different from the habits of the Chechimecas, who now possess the country, and who are supposed to have expelled the nations once living here, &c. or it might be owing to some great famine."

From the accounts of two Spanish monks, (*Humboldt, Pol. Essay*, ii. 206.) who travelled as missionaries, A. D. 1773, through the countries watered by the rivers Gila, Yaquisila, &c., which empty into the gulph of California, it appears, that the nations visited by them are yet in a demi-civilized state; for these fathers found the Indians near the *Casas Grandes*, to be clothed, and assembled together to the number of two or three thousand, in villages where they peaceably cultivate the soil. They also saw fields sown with maize, cotton, gourds, &c.

These monks, according to Humboldt, (*Pol. Essay*, ii. 215.) were also astonished to find among the Moqui, a nation living on the river Yaquisila, "a town with two great squares, houses of several stories, and streets well laid out, parallel to one another. The construction of the edifices on the Moqui, is the same with that of the *Casas Grandes* on the Gila."

Though an account of the ancient ruins called by the Spaniards, *Casas Grandes*,* more especially belongs to the history of Mexican Antiquities; it may not be amiss at the present time, to give the imperfect account of them related in Humboldt's *Pol. Essay*, ii. 205. The walls are described as being made of clay, rammed down in a frame, &c. A wall intercepted by large towers, surrounds the principal edifice, and appears to have served to protect it. The whole extent of ruins occupies a space of ground of more than a square league. The monk who visited this place, thought he could trace a canal from the Gila, &c.

* In English, *The large or great houses*.

The descriptions which have been given, tend evidently to confirm the tradition of the Natchez related by Du Pratz; and justify an opinion, that they emigrated from some part of the country adjacent to the mountains of New Spain, most probably from their western slope, where they would be in contact to a certain degree, with some demi-civilized people, whose presence in that country, seems attested both by ancient and modern travellers.

But though we have carried the time of the emigration of the Natchez to Louisiana, back to an uncertain antiquity, which would allow them much time to increase, and spread over a considerable extent of country, and which may be in a manner considered attested by the ancient monuments which yet remain; I am still of the opinion, that other tribes or nations, also of a certain degree of civilization, were perhaps equally ancient not only in Louisiana and Florida, but who inhabited the shores of the Mississippi and Ohio, even up to Pennsylvania. This is to be inferred from the existence of those numerous remains, which under the denomination of fortifications, mounds, &c. are so widely distributed over those sections of our country; and which it would be unreasonable to suppose, were the monuments of but a single nation.

We deem it most probable, that those monuments are the work of several tribes, who possessing that imperfect degree of civilization, which we have just attempted to shew belonged to the Natchez; and who were fully able to construct any monument hitherto discovered North of Mexico. These other tribes have probably been exterminated by the barbarian nations around them, or compelled to migrate elsewhere; perhaps pressed down towards Florida, where they were incorporated with a population of congenial disposition.* Of these events, however, we have little information; they happened in that dark period of American History, which precedes the settlements of Europeans on our shores; and as related by Indian tradition, are liable to every error that may be induced by time, by vanity, or simple mendacity. What little we have to say further upon this subject, will be detailed in our *Inquiries on the Fortifications, Mounds, &c. of the Western Country.*

* Du Pratz mentions, (*Hist. Louisia.* ii. 145.) that in his time, there were living among the Natchez, the Grigras and Thioux, two nations that had been adopted by them. Of the latter, he says they were formerly one of the strongest nations of the country. But he does not mention them as being remarkable in any other particular.

CHAPTER V.

OF THE INSTITUTIONS OF THE MEXICAN EMPIRE.

THE next demi-civilized people in geographical order after the Natchez, were those of Mexico, whose interesting institutions constitute the subject of the ensuing chapter.

When the Spaniards under Cortez invaded the kingdom of Mexico, they found several partially civilized nations, established in various parts of that country, which we perhaps not very accurately denominate Anahuac.* The Mexicans, were the most eminent in political importance among these different nations, yet in degree of demi-civilization, many of these last were not their inferiors. Though this fact is generally admitted by the Spanish writers, who are our only authorities, they have said little, however, concerning any other people than the Mexicans, contenting themselves with the general observation, that these different people professed the same religious dogmas, used the same hieroglyphic system, and that the same manners and institutions were common to the country. Therefore in describing the Mexicans, it may be said, they described all the demi-civilized people of ancient Anahuac. Whether this inference be correct or not, we have now few means of ascertaining, and in treating of these various people, we are compelled to follow the path laid down by the Spanish writers, and make the institutions of the Mexicans our text, only mentioning other people incidentally, as we may have any accounts of them transmitted to us in the histories of the Mexican conquest.

But though we are thus restricted to the history of the Mexicans, we cannot introduce the subjects of this chapter to the reader, without expressing much doubt as to the fact of this general similarity of nations. They at any rate dif-

* Anahuac, was the name originally given to the vale of Mexico, and signified in that language, *adjacent to the waters or lakes*. It has been sometimes used as nearly synonymous with New Spain, which is incorrect; for the latter appellation embraces a much larger territory than Anahuac, which certainly did not extend beyond the 21st degree of N. Lat. Its southern boundary is said to have been about Lat. 14° north, which is a very inaccurate limitation; for the country is something in the shape of a quadrant of a circle, bending from the north to the east. We shall therefore consider it bounded on the south by the 94° of W. Lon., or in other words extending to the northern boundaries of the Provinces of Chiapa and Tabasco; and excluding Yucatan, which politically is attached to the kingdom of Mexico.

ferred materially among themselves in languages, and forms of government; and we cannot but regret that the history and antiquities of several nations of New Spain, have sunk into oblivion, leaving a name only behind, with a belief that they were similar in their institutions, and equal in degree of civilization to the Mexicans.

The names of the different people who inhabited Anahuac, we shall introduce in the present page with as brief an account of them as possible. This seems to be a necessary step in the outset of this chapter, that our ensuing observations on their institutions, may be more satisfactorily understood. Whatever discussion is connected with their traditional histories, we shall reserve until the conclusion of the chapter, when we shall be able to resume the subject to greater advantage, after having described as correctly as we are able, their peculiar institutions, manners and customs.

The Toltees, or Toltecas, were the most ancient nation of Anahuac of whom we have any particular knowledge. We do not say they were the first people that ever lived there, but they are the most ancient of those nations whose traditional history has reached our times.

Before this people emigrated to Anahuac, they lived in a country somewhere to the north, which was called by them Huehuetaupallan, in which Tollan, their original country, was situated, and from whence they derived their name Toltecotl, which signifies a native of Tollan. No reason is assigned why they left their ancient country, other than the simple declaration that they were banished. According to the Abbé Clavigero, they commenced their journey A. D. 596, but Humboldt (*Researches*, ii. 249,) says A. D. 544. During their emigrating march, they stopped at various places as it best suited their convenience. Sometimes they tarried for a few months or days, and at other times for several years; when they erected houses, and cultivated lands, raising such things as were necessary for their subsistence or comfort. In this slow yet gradual manner, for it appears they constantly progressed southwardly, they arrived in Anahuac, one hundred and four years after they first commenced their emigration. Here they built a town, called Tollantzinco, where they remained about twenty years, when they finally removed about forty miles westward, and founded the city of Tollan or Tula; so called after the name of their ancient country. This city became the capital of their new country, and the court of their kings.

Their kingdom in Anahuac, was founded A. D. 607; and lasted three hundred and eighty-four years. During this pe-

riod but eight monarchs reigned over them, which gives an extraordinary length to each reign, if we were to understand it literally: but it is explained by a singular law of that people, which required that their kings should reign neither more nor less than a Toltecan age, which was fifty-two years. If the king outlived that period of time, he then resigned, and another was enthroned in his stead: but if he died before the expiration of the cycle, the nobility assumed the government, and ruled over the kingdom in the name of the deceased monarch, for the remaining years of the cycle. In one instance mentioned by Clavigero, the nobles thus ruled the land for forty-seven years, the sovereign, who was a queen, having died in the fifth year of her reign.

The Toltecas were the most celebrated of all the nations of Anahuac, for their general civilization, and particular skill in mechanical arts. They appear from the earliest tradition to have lived always in cities, under the government of kings with regular forms of law; and had from all accounts, less of a martial character than the neighbouring tribes. The several nations that succeeded them in the occupancy of Anahuac, acknowledged themselves indebted to the Toltecs for their knowledge of agriculture, and the industrious arts. This people possessed the art of casting gold, silver, and copper, into such forms as pleased them; and they had the skill to cut gems, and precious stones, into various ornamental figures. But what chiefly establishes their claim to civilization, was that ingenious, but somewhat complex astronomic arrangement of time, which prevailed among them, and was adopted by all the demi-civilized nations of Anahuac. Of this system we shall discourse at length in the proper place.

During the four centuries that the Toltecan monarchy lasted, they multiplied considerably, and extended their dominions in various directions, building numerous and large cities. But at last a succession of years of famine, and desolating pestilence,* put an end to their monarchy and kingdom about the year A. D. 1051. (*Humboldt, Res. ii. 251.*) The greater part of those that escaped death from plague or famine, fled their country, and went to Yucatan, Guatemala, &c., leaving but a small remnant of their population in Tula, Cholula, and certain parts of their once flourishing kingdom.

For about one hundred years after the destruction of the

* This pestilence is supposed to have been the *matlazahuatl*, a disease which bears some resemblance to the yellow fever. It is said, however, to attack the Indians alone, who are exempted from suffering by yellow fever. (*Humboldt, Pol. Essay, i. 88.*)

Toltecan monarchy, the land of Anahuac remained nearly depopulated; when a nation emigrating from the north under the name of Chechimecas, took possession of the unoccupied territory.

The Chechimecas, like the Toltecas, came from some country to the north of Mexico, which they called Amaquemecan, where, according to their traditions, they had lived many years, under a monarchical government. Clavigero says, they obeyed the orders of their sovereigns with as much submission as is observed in the most civilized nations of Europe. They had distinctions of nobility established among them, and the plebians treated with great respect those whom birth, merit, or princely favour, had raised above the ordinary classes. They dwelt in communities or villages composed of huts, but practised none of the arts that belong to civilized life.

Their religion consisted of the simple worship of the Sun, to which they offered the herbs and flowers, that grew spontaneously in the fields.*

The motives by which they were influenced to leave the kingdom of Amaquemecan, is partially explained by the following tradition, related by themselves. The last king they obeyed in that country, on his demise had divided the government between his two sons, one of whom, either not brooking the division of the regal authority, or perceiving that the mountains of the kingdom were not sufficient to support the population, determined on seeking a better country; in which resolution he was supported by a large part of the nation. In eighteen months after their departure, they arrived at Tula, in Anahuac, the ancient capital of the Toltecas, and after some inconsiderable removals, they finally took possession of the country; according to Humboldt, (*Research. ii. 251.*) about A. D. 1170. They intermarried with such of the Toltecas as were found in the country: and by these connexions, received the knowledge, arts, and civilized habits, that anciently distinguished that people.

Eight years after the Chechimecas had been established in the country, there arrived in Anahuac, a considerable body of persons under the command of six chiefs or leaders. These people were the Nahuatlacks, consisting of six tribes at the time of their arrival. The Mexicans who were a seventh tribe of this people, had parted company from them a short time previously. As there are circumstances connected

* This brief description of the Chechimecas, accords almost precisely with the character given of the Natchez by Du Pratz. The apparent analogy is worth remembering, as we shall again allude to the fact.

with their history, that to be sufficiently comprehended require a little anticipation, we shall for the present suspend our description of these people, until we can dispose of another body of strangers, who emigrated to Anahuac after the Nahuatlacks. These were the Acolhuans, who report themselves to have come from a country called Teoacoluacan, neighbouring to the kingdom of Amaquemecan, from whence the Chechimecas had emigrated. The Acolhuans, are represented to have been the most civilized of all the nations of Anahuac, since the times of the Toltecas.

A very close union took place between them and the Chechimecas, which finally resulted in their adopting the Acolhuan name, as their national appellation. The name of Chechimeca, was retained only by the ruder and more barbarous part of the nation, who preferred living in the mountains and forests as hunters, rather than submit to the toils of agriculture. This part of the nation afterwards mingled with the savage Otomies, and are distinguished by the Spanish historians under the term of barbarous Chechimecas.

The government of the Acolhuan monarchy lasted many years, and extended at one time over the whole land of Anahuac. But it had been gradually broken down, by the rise of other states and governments previous to A. D. 1521, when it was entirely destroyed by the Spaniards, who accomplished the ruin of it, and all other ancient governments of the country, by the invasion of Cortez; a hero "damned to everlasting fame."

The nations of Anahuac most celebrated in history, were the Nahuatlacks, whose arrival we have just stated, was previous to that of the Acolhuas. They consisted of seven tribes, who were respectively called Sochimilcas, Chalchese, Tapanecas, Colhuas, Tlahuicas, Tlascalans, and the Mexicans or Aztecs. By ancient tradition, they are reported to have proceeded from seven caves in the mountains of the north. (*Acosta Nat. and Mor. Hist.* 499.) But however this may have been, we may more readily believe they were originally of the same country, as they spoke the same language. It may also be well to observe, that the names by which these tribes were distinguished, were assumed by them from local considerations, after they had settled in the land of Anahuac.

Of these tribes, the traditions of the Mexicans alone have reached our time; and these are both vague and unsatisfactory. It is related by them, that their ancient country was called Aztlan, and that while living there, one of the most influential persons in the nation, from some unassigned motive, used his best endeavours, to persuade the nation to change

their country. While this subject was under the consideration of their council, a bird near them, constantly sung certain notes resembling the Mexican word *tihui*, which signifies *let us go*. Taking this circumstance as an omen, the chief orator addressed the people with such effect, that they abandoned their country, and commenced their march southwardly about A. D. 1160; but according to Humboldt, (*Research*, ii. 69,) A. D. 1038 or 1064. The first place in their journey at which they halted, was on the banks of the river Gila of the gulph of California. Here they remained for some time, and erected those buildings known to the Spaniards as the *Casas grandes*; which continue to the present day. Their next stopping place was at Culiacan, on the gulf of California, where they remained three years. Here the Mexicans made a wooden statue of their god Huitzilopochtli, which they transported on a chair or litter with them wherever they removed.*

From Culiacan, they marched to Chicomocto, a position not exactly known, but supposed to be about twenty miles south of the city of Zacatecas, where are still some remains of an "immense edifice," (*Clavigero, Hist. Mex.* i. 153,) which according to the tradition of the ancient inhabitants of that country, was the work of the Nahuatlacke.

At this place, probably from some disagreement among them, six of the tribes moved off, leaving the Mexicans behind with the idol they had made. The six tribes advanced on to Anahuac, and made independent settlements in the country, a few years prior to the arrival of the Acolhuas, as we have already mentioned. The Mexicans or Aztecks, took a circuitous route, and after stopping at various places for several years, they finally settled on some marshy islands in lake Tezcuco; being directed by ancient prophecy to fix themselves in that place, where they should find an eagle seated on a prickly pear, (cactus)† growing out of a stone. This portentous appearance was happily observed at these islands, about one hundred years after their arrival in Anahuac. Here they commenced about A. D. 1325, (*Humboldt, Res.* ii. 252,) building a city at first called Tenochtitlan, afterwards Mexico.‡

We shall not relate the political history of the Mexicans;

* Acosta (*Nat. and Mor. Hist.* 504,) says, this image was carried by the Mexicans from the commencement of their journey; supported by four priests, who appear to have conducted the march by oracular communications.

† Most probably the *Cactus sylvestris*.

‡ Tenochtitlan signifies, place where the prickly pear grows out of a stone. (*Clavigero, Hist. Mex.* i. 359.) The etymology of Mexico, is place of Mexitli; a synonyme of Huitzilopochtli, their god of war. (*Clavig.* i. 62.)

this being a matter foreign to our undertaking: but it may not be amiss to state generally, that after they arrived in Anahuac, until they commenced building the city of Mexico, a period of about one hundred years, they lived in the most abject state, enduring all kinds of privations, and finally loss of their independence, being made subject to the authority of the Acolhuan kings. However, they ultimately emancipated themselves by force, and gradually arose to such power, that when Cortez invaded Anahuac, the greater part of the country acknowledged their dominion.

It is believed, that the Toltecas, Chechimecas, Acolhuas, and the Nahautlacs all spoke the same language. (*Clavig. Hist. Mex.* i. 144; *Humboldt, Res.* i. 81.)

Such are the brief accounts of some of those nations, who were established in Anahuac at the time of the Spanish conquest. But besides them, there were others in the country, of the time of whose emigrations we have no tradition; but which it is most probable, were anterior to that of the Toltecas. Of these people, the Miztecas, and Zapotecas, were both civilized and industrious. They lived under regular governments, exercised the same arts as the Mexicans, computed time in the same manner, and perpetuated the memory of events by the same pictured representations. Humboldt (*Researches*, i. 129,) considers the Zapotec nations, to have been superior to the Mexicans in civilization; and that it is possible were more ancient than the Toltecas. (*Researches*, ii. 249, *notes*.)

The Tarascas who inhabited Michuacan, lived in many cities and villages according to Clavigero; and seem to have been partially civilized: Humboldt thinks they were in Anahuac previous to the coming of the Toltecas.

The Olmecas, and Xicalancas, were also considered to be of the same remote antiquity in Anahuac. I can say nothing, however, of their degree of civilization. Siguenza says they built the pyramids of Teotihuacan.

The Otomies, who were a barbarous and numerous race of savages in the northern parts of New Spain, were considered the most ancient people of the country. We shall pass them over with the other barbarous tribes, as not being connected with the present subject of this chapter; as well as the enumeration of other tribes of Anahuac, of whom we know nothing but the name.

Of the Forms of Government established in Mexico, &c.

The principal governments established in Anahuac at the time of the Spanish conquest, were the kingdoms of Mexico,

Acolhuacan, Tlacopan, Michuacan, and the republics of Tlascala, Cholula, and Huexotzinco.

Of these republics we know little either as respects their form or administration. They appear, however, to have been rather aristocracies, established on the ruins of a monarchy; for Clavigero (*Hist. of Mexico*, i. 146,) remarks in his brief notice of Tlascala: "at first they obeyed one chief, but afterwards when their population was considerably increased, the city was divided into four parts, each of which was governed by a chief or lord, to whom all other places dependent on such division were likewise subject; so that the whole state was composed of four small monarchies. These four chiefs, together with the nobles of the first rank, formed a kind of aristocracy, which ruled the general affairs of the nation, made war or peace, and appointed military officers."

Whether these chiefs or lords were hereditary in their dignities, Clavigero does not say; but I presume they maintained the system followed every where else in America, even among the most barbarous tribes.

We are entirely unacquainted with the political constitution of the other two republics; or in fact of any other particular, than that the Spaniards classed them as such.

The monarchical governments of Anahuac, seem to have been coeval with the settlement of the country by the Toltecs. We have already mentioned the curious peculiarity of their law requiring the kingdom to be administered in the name of each monarch for fifty-two years; and we see by the instance there cited, that females could inherit the throne.

The Acolhuacan monarchy, arose from the union of the Chechimecas and Acolhuas, as mentioned in a preceding page, and which form of government we presume was their ancient political constitution; for when they arrived in Anahuac, they are said to have been led by princes. What features of their government may have been derived from the Toltecas, we know not; but the succession to their throne was regulated according to the rank of the mother or queen who bore a son; *i. e.* the son of the noblest woman succeeded to the throne.

We are ignorant whether there were any peculiarities in the governments of the other nations of Anahuac, excepting those of the Aztecs or Mexicans.

The Mexicans, until A. D. 1352, lived under an aristocratical form of government, which was administered by persons the most eminent in the nation for nobility and wisdom.

Of these there were twenty in number, at the time they laid the foundations of the city of Mexico. From various political considerations, and from the example of surrounding nations, about twenty-seven years after that time, they determined on having a king. Their choice elected, or rather called to the throne, Acamapitzin, who was considered one of the most prudent and deserving persons in the nation. Just before his death, he surrendered his dignity into the hands of the chief people of Mexico, advising them to choose as his successor the person most capable of serving them, at that time both poor and in subjection to the Tepanecas. An interregnum of four months followed this event, a circumstance which never took place afterwards; for the electors in future made their selection, a few days after the death of the preceding monarch.

These electors, which is a singular feature in a semi-barbarous government,* were chosen by the nobility on the accession of every monarch, to serve for the next imperial election. They were four in number, though at a later period, the kings of Acolhuacan and Tacuba were made honorary electors; these had no vote, though they appear to have had the power of ratifying the choice of the other four electors. They do not seem to have been ever present at the time of election.

The Mexican king was not succeeded by his son, but by his brother; we presume upon the same principle that seems to have prevailed throughout America, of tracing their descents by the female line. In default of brothers, one of the nephews of the late monarch was selected, or in failure of this kindred, one of his cousins; thus restricting the electors to choose out of certain branches of one family, according to a prescribed law, but leaving them to select the individual. (*Clavigero, Hist. Mexico*, ii. 126.) This method of electing kings, prevailed until the Spanish conquest.

In the latter reigns of the Mexican kings, they lived in great state and pomp, attended by numerous servants, who served them upon gold and silver plate with great varieties of food. They maintained a numerous harem; and when they went abroad, were carried on the shoulders of their nobility in an ornamented litter, and cloths were spread before them when they condescended to walk on the ground.

* The system of choosing kings by a body of electors, has been practised by a much more barbarous people than the Mexicans. The Goa Macassars, (*Craefurd, Ind. Archip.* iii. 14,) choose their king and his ministers by a body of ten electors. We are not told, however, who appoints these electors.

The Muyscas, an American people in Colombia, appointed their great pontiff by four electors, (*Humboldt, Res.* ii. 108,) who were civil chiefs.

The palace was composed of a great number of spacious, but low houses, in which the whole court for the most part resided. Connected with the imperial residence of Montezuma, were extensive gardens, with menageries for beasts and birds, and ponds for fishes. He had also made a collection of odd and singular looking men. There were also military arsenals, and magazines of clothes and provisions, baths, &c., connected with the palace. (*Clavigero, Hist. Mexico*, i. 283.)

The Mexican crown was something like a small mitre,* one point of which stood up in front, and the other fell back over the neck. It was made of gold, silver, or some other rich material.

The kings of Mexico and Acolhuacan, had three supreme councils, composed of the chief nobility, in which were deliberated the general affairs of the kingdom, the revenues of the king, and matters relating to peace and war; and in general, the king resolved upon no measures of importance, without consulting these counsellors. (*Clavigero, Hist. Mexico*, ii. 132.)

The Mexican nation was divided into four castes, *viz.* nobles, priests, soldiers, and common people; and like the ancient Egyptians, Celts, Hindus, &c., the sons followed the occupations of their fathers. Even the magistracy was hereditary. (*Clavigero, Hist. Mexico*, ii. 125.)

The Mexican nobility were divided into several classes, each of which was distinguished by particular badges or insignia. These privileged classes, alone wore gold and gems upon their clothes; and to them belonged all the high offices of the court, the magistracy, and the principal commands in the army.

Nobility was hereditary from father to son, differing in this respect from the law of regal succession: in default of sons, the brothers of the deceased inherited.

Even among the poorest Mexican Indians of the present day, every inheritance descends to the eldest son.

It is supposed, that the laws of the Mexicans were at first enacted by the nobility; in later times this was a part of the royal prerogative, and their laws were consequently often capricious and despotic. Their laws were exhibited to the people as far as practicable, by hieroglyphic paintings, and were enforced by officers appointed by the king.

Among the Mexicans, there were several different tribunals for the administration of justice. Their principal court,

* "The crown of the king of Lancerota, (one of the Canary islands,) was like a bishop's mitre." (*Glass, Hist. of Canaries*, p. 8.)

called Tlacatecatl, consisted of five judges, who sat daily in a public place appointed for this purpose. In civil cases their decision was final; but in criminal offences, an appeal might be made to an officer called *Cihuacoatl*, who decided ultimately on the case; unless it was of so perplexed a nature, that he could not determine its equity. If this embarrassment was acknowledged, the case was discussed before the king, in an assembly of all the judges, that was regularly held every eighty days. (*Clavigero, Hist. Mexico*, ii. 147.)

The *Cihuacoatl* appointed the inferior judges; and so great was the respect paid him, that if any person made use of his ensigns of office, he was put to death, being the same punishment assigned to the offence of assuming the regal distinctions of the monarch.

Good order was maintained among the people, by appointing certain officers called *Centectlapixque*, to observe the conduct of a certain number of persons put under their charge, and who were obliged to report to the proper authorities, every offence with which they became acquainted.

In the kingdom of Acolhuacan, the judicial power was divided among seven principal cities, and the judges remained in their tribunals from sun rise to sun set. Their meals were brought to them in the court; and that they might not be taken off from their employment to provide for their families, nor have any excuse for being corrupted, they had agreeably to an usage which also prevailed in Mexico, possessions and labourers assigned to them for support.

The punishments for crimes were depicted in their paintings, and as laws forbidding immorality, they were no indifferent code; but in many instances they were cruel and unnecessarily severe. The laws of Acolhuacan, were more severe in their penalties than those of Mexico. But as this subject does not properly belong to our discussions, we must refer the reader who may be curious on this subject, to the Abbé Clavigero's history of Mexico.

The lands of the Mexican empire, were divided into those of the king, nobility, temples, and communities; and their paintings distinctly represented each of these different kinds of property.

The nobility might alienate their possessions to each other, but not to plebians, and provided the king had not expressly forbidden the transfer. Something like fiefs, though few in number, were recognized in their government; but the investiture was repeated every year, and the vassals were not exempted from paying tribute to the crown, as was required of all other plebians.

The lands that belonged to the communities of cities, or villages, could not be alienated in any manner whatever.

The contributions or taxes of the Mexican subjects were excessive, and consisted of a vast variety of articles, such as maize, ornamental feathers, dresses of cotton, skins of beasts, living birds, cocoa, plates of gold, cochineal, emeralds, turquoise stones, amber, gum elastic, copal, and other gums, lime and building materials, military weapons, cigars, honey, paints, ochres, copper axes, sheets of paper, mats, chairs or stools, vases, and finally their personal service, whether in peace or war, when required. (*Clavigero, Hist. Mex. ii. 144.*)

The merchants also gave a part of their merchandise, and artists a portion of their works to the king.

The greatest rigour was employed in collecting these oppressive taxes, and if any one failed to pay the prescribed tribute, he was sold for a slave.

Slavery existed among the Mexicans under the following circumstances: captives made in war, as a punishment for crime or debt, or when individuals sold themselves in times of famine or other national calamities; but more righteous than Europeo-American institutions, their children did not suffer from the crimes or misfortunes of their parents; for they were free.

It is not a little surprising, that their laws gave freedom to a slave that fled for refuge to the royal palace. (*Clavig. Hist. Mex. ii. 155.*)

As a part of the political establishment of the empire, we must mention, that along the public roads little huts were erected at about six miles apart, at which certain persons were stationed, who had been trained to running. They acted as messengers or couriers of the king, to and from the different parts of the kingdom. As soon as one of these persons had received a message, he ran as swift as possible to the next hut or stage, and communicated his order to the one there stationed, who immediately ran off to the stage next to him, &c. It is affirmed by the Spaniards, that information was forwarded in this manner near three hundred miles a day.

By these messengers, fresh fish were daily brought to Mexico for the use of Montezuma, from the gulf of Mexico, a distance of two hundred miles.

Of the Dwellings of the Mexicans.

The houses of the poorer class of people were built from reeds, unburned brick, or stone and mud. Their roofs were covered either with a thatch of grass, or with the leaves of

the aloe, laid in such a manner over one another, as to exclude the rain, and frequently a living tree formed one of the four corners of the house, by which a shade was thrown over the building. These cabins generally consisted of but one room, but if the family were not very poor, they had a second apartment, and an *ajauhcalli* or chapel, a *temazcalli* or vapour bath, and a little granary.

Bernal Dias (*Hist. Conq. Mex.* 95,) observes, that in a certain part of the Tlascalcan territories, where the country was thickly settled, that numbers of the people lived in subterraneous dwellings.

The houses of the nobility, and of persons in good circumstances, were built of stone and lime. They consisted of two stories, having halls, chambers, &c., and large court yards, often paved and chequered with coloured stones. The roofs were flat and terraced, and the walls so whitened, that the Spaniards when they first saw them, describe them as shining like silver.

They had no doors to their houses, but a curtain was hung before the entrance to prevent any inquisitive examination.

They had made considerable advances in the principles of correct architecture, for they not only built with solidity, but they knew how to construct arches and vaults, as appears from their vapour baths, the remains of the royal palaces of Tezcuco, and from their ancient paintings. (*Clavig. Hist. Mex.* iii. 315.)

They also cut square and round pillars from stone; but which appear to have been without base or capital. Cornishes, and other architectural ornaments were in use; and sometimes a laboured work in stone was fixed round the door of the houses of great men, resembling a snare or trap, and sometimes a serpent's head and throat.

Among the more ancient remains of Toltecan and Zapotec architecture, we must note the monument of Xochicalco, and the ruins of Mitla described by Humboldt. (*Research*, i. 108, ii. 153; *Pol. Essay*. ii. 45, 155.) These we are unable to describe without plates, which are too expensive for our publication.

The temples of the Mexicans, though very different in construction to those of ancient Greece or Rome, were built with some regard to taste and magnificence. These we shall particularly describe under the head of religion.

They also made aqueducts of stone cemented with lime, which in some instances extended two miles, the ruins of which were to be seen but a few years ago.

Cortez, in his letters to Charles 5th, (*Humboldt, Pol.*

Essay. ii. 31,) states, that water was brought to Mexico from the spring of Amilco, "in pipes made of burnt clay."

Of the Agriculture of the Mexicans.

The Mexicans, Acolhuans, and other nations of Anahuac, as well as the more ancient Toltecas, derived a great part of their subsistence from the cultivation of the field and garden.

The several kinds of implements with which they performed their agricultural labours, were both of wood and copper; but they have sunk into oblivion without having been described.

Their fields were irrigated by artificial canals from reservoirs or dams of water, which they had providently collected for that purpose.

Their fields were surrounded with enclosures of stone, or with hedges of the aloe, which make an excellent fence.

The plants principally cultivated by the Mexicans, were maize, (*zea*) bananas, (*musa*) cacao, (*theobroma*) beans (*phaseolus*) of various kinds, sweet potatoes, (*convolvulus*) the sweet species of jucca or cassava, (*jatropha*) tomatoes, (*solanum*) leeks and onions, peppers, (*capsicum*) cotton, tobacco, the magney or aloe, (*agave*) and various other plants, not known out of the kingdom.

In the work of the field the men bore an equal part with the women, a circumstance which remarkably distinguishes them from the barbarous nations.

Nor was their labour confined to articles of nutriment alone; flowers were cultivated in great quantities for offerings to their deities, as presents to great men, and for general ornamental purposes.

Nothing can establish the agricultural character of the Mexicans better than the descriptions of their gardens, which are mentioned by the earlier Spanish writers with great admiration. The floating gardens, so generally known in Mexican history, were called *chinampas*, and were constructed in the following manner. Having made a large and entangled frame-work of plaited willows and such like plants, they laid on it a sufficient quantity of earth and mud, in which they planted every thing suitable to such an exposure. The frame work was sufficiently buoyant to float the whole mass, with about a foot of elevation above the surface of the lake. For the most part they were of a regular figure, but much longer than they were broad, and were towed about whithersoever the proprietor chose.

Their gardens on the main land, especially those of their kings, were even magnificent, and would have been consi-

dered such in any kingdom of Europe; as the following description, I presume, will satisfy the reader of the fact: "The garden of Iztapalapan, was laid out in four squares, and planted with every variety of trees, through which were a number of avenues and paths. Several canals of water passed through it, upon one of which boats could enter from the lake. In the centre of the garden was a fish pond, the circumference of which measured sixteen hundred paces.

The garden of Huaxtepec was more extensive; for it measured six miles in circumference, and was laid out and adorned with great taste and skill. These descriptions are attested by Cortez, Bernal Dias, and Hernandez. (*Clavigero, Hist. Mex.* ii. 181.)

Of the Aliment, and Domestic Manners of the Mexicans.

It would be useless, if not impossible, to describe the various articles of food consumed by the Mexicans, and other demi-civilized people of Anahuac. They not only used the flesh of various animals caught by hunting and fishing, but they bred for subsistence, turkeys, quails, geese, ducks, deer, rabbits, fish, and a variety of other animals, that are not known out of the country; as the pecary (*sus tajassu*) and the techichis, a quadruped like a dog, &c.

The articles of vegetable food used by them, we have already enumerated under the head of agriculture.

They made syrups and sugar from maize stalks and the maguey plant, which is mentioned by Cortez, as being sold in their markets. (*Humboldt, Pol. Essay*, ii. 315.)

They used salt with their meats, which was manufactured from saline waters near Mexico. (*Humboldt, Pol. Essay* ii. 64.)

They eat off a mat laid on the ground, using no table; but they had low seats or stools, as a part of the furniture of their houses. They drank several kinds of fermented liquors, drawn from the maguey, palm, and maize. The best as well as the most common drink, was that drawn from the maguey or aloe, and called by them *octli*; by the Spaniards, *pulque*. From a single aloe, six hundred pounds of juice is generally drawn in the space of six months. This liquid after fermenting, which is assisted by the infusion of other plants, acquires intoxicating qualities, though not as great as that of wine.

They were, however, restrained in their use of pulque, under the government of their national kings; for drunkenness was punished in young persons with death, and in those of advanced life, by severe penalties. But persons of seventy

years and upwards, might get drunk whenever they pleased. (*Clavig. Hist. Mex.* ii. 153.)

They took snuff, and smoked tobacco mixed with aromatic leaves or gums, either in a pipe or enclosed in a hollow reed.

The most common amusement of the Mexicans was a game of ball, whose chief features may be observed, I believe, among every nation of America, (see page 86.) The ball itself, was made of gum catchouc, and was struck by any part of the arm or leg, except the hand and foot; which must have required great dexterity. But we do not deem it necessary to further describe the peculiarities of the game.

They were exceedingly dexterous in feats of activity; which though too uninteresting to merit description, filled the first Spaniards with so much astonishment, that they believed they were aided by supernatural means.

They also had their sedentary games, one of which was played in the following manner. A square was drawn upon a mat, within which were two diagonal, and two cross lines; upon these lines they placed little stones, whose positions were regulated by throwing up beans marked with points like dice. Whoever was able to get three stones in a row, won the game.

Poetry, more properly singing, was highly relished by the Mexicans according to Clavigero; and they had certainly gone very far towards establishing theatrical exhibitions. But as we conceive what is to be said upon that subject, belongs more especially to their religious ceremonies, we shall introduce it when we discourse of their god Quetzalcoatl.

Their musical instruments consisted of trumpets, conchs, small flutes, various kinds of rattles, and drums of different sizes, the largest of which, both in construction, magnitude and sound, equalled those used on the Orinoco (see page 137.)

They also entertained themselves with numerous characteristic dances. Some of these were religious, others warlike, and others illustrated the labours of agriculture, hunting, &c. The kings, priests, and nobles, all took parts in suitable dances.

Of the Manufactures and Arts of the Mexicans.

The manufactures of the Mexicans were of many different kinds, which for better consideration we shall divide into two classes; 1st. those of necessity or utility, and 2d. those of decoration or ornament.

In the first place, their garments, in a great proportion, were

made of threads, spun and wove from various plants, and occasionally intermixed with fur or feathers. Of cotton they made cloths, according to Clavigero, as fine as those of Holland, and which were even valued in Europe. They wove these cloths with various coloured figures, representing animals, flowers, &c. With feathers intermixed with cotton, they made mantles, carpets, &c.; and with the fine hair on the bellies of hares and rabbits, intermixed with raw cotton, they spun a thread which was dyed of various colours, and woven into good cloth.

From the maguey they made two kinds of cloth, one of which was like hempen-cloth, and a finer kind which resembled linen; and from the fibrous barks of various plants peculiar to their country, they made other fabrics similar in appearance.

They also manufactured leather like the chamois for clothing; an article which we have mentioned already, as being used by the barbarous tribes, and they also prepared the skins of beasts and birds with the hair or feathers, for garments in colder weather.

The Mexicans manufactured a species of coarse silk, produced by an insect of the country. (*Clavigero, Hist. Mex.* i. 95.) Cortez in his letters to the emperor Charles 5th, mentions silk as one of the commodities sold in the Mexican markets. They also made paper from this silk.

In their pottery they were considered ingenious workmen, and they manufactured a great variety of earthen wares, which they embellished with various figures and colours.

From obsidian, called by them *itzli*, they made mirrors, knives, lancets, and other cutting instruments.

From copper they manufactured their culinary vessels, agricultural implements, tools, and military weapons. From the accounts given by Herrera, (*Hist. America*, iii. 253,) it appears that they understood the art of hardening copper for their tools; for he says "they cut like steel."

From gold and silver, they manufactured plate for the service of their kings, and for various other purposes.

They employed lead and tin in the fabrication of various utensils, which were sold in their markets when Cortez first visited Mexico. (*Herrera, Hist. America*, ii. 369.)

The Mexicans made large quantities of paper from the leaves of the maguey and other plants, upon which their laws, institutions, and history, were depicted. As these books were painted with deep and glowing colours, they testify to their knowledge of paints and dyes: We have derived cochineal from them.

They made statues of wood, clay, and stone, I believe, alone for idolatrous purposes; and which were destroyed by the first Spanish conquerors in great numbers. They also executed some works of basso relievo in stone, which in one instance at least, is mentioned with commendation by Acosta.

In fine and fancy works of gold and silver, they were at the time of the conquest, reputed equal, if not superior to the Spanish goldsmiths; and they understood the art of cutting and polishing gems and coloured stones, to the greatest perfection. The account given by Clavigero of these matters, is not the least interesting part of his work.

But perhaps the most celebrated ornamental works of the Mexicans, were those designs in feathers called by the Spaniards *mosaic*; which represented any thing that might be expressed by painting. They were made with infinite labour by pasting on paper the feathers of the humming bird, and other small birds of brilliant plumage. All the earlier historians of Mexico, speak of these feather-paintings with great admiration; and they were valued by the Mexicans themselves, beyond any other kind of ornamental work.

Of the Dress of the Mexicans.

The dress of the men was very simple, being for the most part nothing but a mantle or cloak, of about four feet square, made from some of those manufactures we have just described, and which was tied over the breast. The breech-cloth was worn for purposes of decency alone; and occasionally they wore light drawers reaching to the knee. They wore sandals on their feet, which were tied on the foot and ankle with strings; being a simple sole of skin or coarse maguey cloth.

They do not appear to have worn any ordinary covering for the head, as a protection from the sun or weather.

The women wore a cloth wrapped round the waist, which descended to the middle of the leg; and over this, a kind of loose chemise without collar or sleeves.

The dresses of the nobility differed from those of the common people, only in the fineness and quality of the materials; and which were further distinguished, by the gold and jewels which they, as a privileged class, were alone permitted to wear.

Of Commerce and Traffic among the Mexicans.

The circumstance of the Mexicans having an extensive internal commerce among themselves, presents their state of civilization in a strong light, and a detailed view of their

home trade, if we could carry it out to its proper length, would I think, shew facilities in acquiring the means of subsistence and comforts of life, little inferior to the national economy of many European nations at the time of the Spanish conquest.

In the nature of their traffic, we more distinctly perceive the true principles of commerce, than we can with that of civilized nations; who by making use of a metallic currency as an intermediate article of barter, have so far involved the subject of trade with the value of money, that there is hardly any subject less generally understood. But without the least idea of introducing a subject so foreign to the nature of our essay, we beg leave to say, that the reader curious in these matters will here have an opportunity of observing the true principles of trade, and the modification of barter, by the establishment of some common article of valuation like our money system; to which modification the Mexican trade was most sensibly advancing, at the time the Spaniards subverted the empire of Montezuma. (*Clavig. Hist. Mex.* ii. 191.)

A very large square was set apart in all the principal cities of the kingdom, for the exhibition and sale of the various articles of merchandise brought to market. Though these bazaars were attended every day, yet every fifth day was considered the principal or proper market day; and to suit the convenience of the various merchants that constantly visited these marts, the adjacent cities held their principal market on such days as would not interfere with those of their neighbours. The number of persons collected together at such times in the city of Mexico, has been estimated by the Spanish conquerors at forty or fifty thousand.

Into this public square, was brought every imaginable article of utility or ornament, suitable to the Mexican taste. Each class of merchandise was confined to a particular part of the market, out of which it was not permitted to be sold or bartered. We may observe in this place, that there were no shops or stores for selling goods, interspersed among the houses of the city; all their traffic was confined to the public square.

The merchants paid a toll or custom to the king, upon all the wares they brought into the market.

Their sales were for the most part a barter among themselves for the various articles they required; but as there was an evident inconvenience in proportioning the values of exchanges where only small quantities were wanted, as well as not having always suitable articles to make the

desired barter, they had adopted the more convenient practice, on suitable occasions, of selling their commodities for certain articles, that could be at all times bartered, either in large or small quantities, among the merchants attending the market. The substances that thus answered the purpose of money, were of the following kinds, *viz.* bags of cacao, which contained a certain number of nuts, and which passed current from one person to another at that valuation. 2d. Small cotton cloths of various sizes. 3d. Gold in dust, which was contained in quills, and was estimated according to the quantity enclosed. 4th. Copper cut into the form of the letter T, was used for small purchases, as also thin pieces of tin.

They sold or exchanged their wares by number or measure, but it is doubtful whether they made use of scales and weights. Cortez in his letters to Charles 5th, (*Humboldt, Pol. Ess.* ii. 11,) says he did not observe any weights to be used in their markets, though he saw certain officers break the false measures used by the salesmen.

To prevent frauds and disorders in these bazaars, certain commissioners were continually going about among the traders; and if they observed any thing amiss, reported it to a tribunal of twelve judges located in the square, who punished the offence according to law.

For the convenience of merchants and travellers, public roads were made, which were regularly examined and repaired every year after the rainy season. In lonely and unfrequented parts of the country, houses were erected for the accommodation of travellers; and bridges or boats provided for crossing rivers.

Their bridges were for the most part made of twisted vines, generally known by the name of swinging or hanging bridges; but it appears from Clavigero, (*Hist. Mex.* ii. 195, iii. 315,) that in some few instances, stone bridges had been constructed.

As the Mexicans and other nations of Anahuac had no animals trained to carry burthens, their heavier articles of merchandise were transported in canoes, but commodities of lighter weights, were carried by regular porters on their backs. These men, called by them *Tlamama*, were brought up from infancy to this laborious service, and it is said that with their usual load, which was about sixty pounds in weight, they would walk fifteen miles per day, and that frequently they made journeys of three hundred miles, loaded in this manner.

Of the Mexican Ceremonies at Marriages, Births, and Burials.

The customs of the Mexicans regarding matrimony and the commerce of the sexes, for the most part resembled the institutions and practices of civilized life, both in what may be termed their decorous or licentious observances.

Fornication was not punished by their laws, but adulterers were stoned to death.

There were public stews in Mexico, and according to Herrera, (*Hist. Am.* ii. 403,) they must have been largely supplied; for he says, that Montezuma suppressed a part of the city, in which were four hundred prostitutes.

Polygamy was permitted, but I presume, was almost entirely restricted to the rich and noble, whose greater means of subsistence would alone permit this expensive indulgence. The Mexican kings generally had several wives; and during the reigns of some of the last monarchs, they had large harems. (*Clavig. Hist. Mex.* i. 281.)

In contracting matrimonial alliances, they were regulated by certain degrees of consanguinity, which do not appear to differ from those established among ourselves: for they permitted cousins to intermarry, but none of nearer degrees of blood. In some remote and more uncivilized parts of the empire, the nobles occasionally married their widowed mothers-in-law, provided they had not borne children to their fathers: but in Mexico, Tezcuco, &c. such marriages were considered incestuous, and the parties were punished severely.

Brothers and sisters-in-law were also allowed to marry after the death of their husbands, not however upon the principle of the Jews, to raise up seed for the dead, but to provide for the family of the deceased, and to raise his children up as their second father. (*Clavig. Hist. Mex.* ii. 151.)

Divorces were allowed under the Mexican laws, but by an equitable ordinance, the judges of the land must authorize the act of separation, before it could be considered lawful.

In contracting matrimony, it seems that the parents alone made the choice, but we presume always regarding the inclinations of the parties, and unless some superstitious omen appeared to forbid the union. Their practices on such occasions, however, merit a general description, as they offer strong analogies in their arbitrary forms to those of some Oriental nations.

According to the Abbé Clavigero, (*Hist. Mex.* ii. 99,) when a young man had arrived to the age of about twenty years, a female between sixteen and eighteen years old, was

singled out for his wife. But before any steps were taken to procure her, the diviners or conjurers were consulted whether the projected match would be a happy one; and according to the responses given on this matter, it was either totally abandoned, or certain elderly women among the most respectable of the young man's kindred, formally demanded her in a humble and respectful manner from her parents. This demand we are told, was at first invariably rejected, but after some days had elapsed, the negotiations were renewed on the part of the young man's friends, and after certain formalities in which the friends alone were concerned, a final answer was given. If the match was agreed on, a certain day was appointed for the nuptials, at which time the bride was conducted to her father-in-law's house, with numerous company and music, and if she was noble they carried her in a litter. The bridegroom and his friends, received her at the gate of the house; when he took her by the hand and led her into the chamber prepared for the nuptials, where they sat down upon a new mat, spread in the middle of the chamber, and near a fire. The priest then *tied the mantle of the bridegroom to the gown of the bride*; and in this ceremony, the matrimonial contract chiefly consisted. The wife then walked several times about the fire, and returning to the mat, along with her husband offered copal to their gods, and exchanged presents with one another. A repast followed, and the married couple eat upon the mat, giving mouthfuls to one another, and to the guests. After the feast, and when the guests had become exhilarated from drinking, they went out into the yard to dance, but the new married pair never stirred from the chamber for four days. They passed these four days in prayer and fasting, dressed in new habits, adorned with the insignia of the gods of their devotions, and drawing blood from different parts of their bodies. These austerities were observed with the greatest exactness, for they feared the heaviest punishments from their gods, if the marriage *was consummated before the end of these four days*.

The first part of the Mexican ceremonies, are very nearly the same with the customs of the Ceylonese upon similar occasions. (*Asiat. Res.* vii. 427.)

The family of the man send a friend to those of the woman, to sound their inclinations on this subject, and generally the girl's family receive notice of it, and give a feast to their guest: a few days afterwards, the nearest and most aged relation of the man, makes a second visit to the girl's family, and informs himself of her fortune and circumstances, and if they are satisfactory he proposes an alliance. To this he re-

ceives no answer, but they treat him with a much greater feast than before, and which is usually a sign of consent. The next day a relation of the girl visits the family of the young man, and receives a considerable entertainment in his turn; he also makes some necessary inquiries, and then says, if the young couple are satisfied, it would be well to marry them. A magician is then consulted as to the most lucky day, hour, &c.

The marriage ceremonies of the Hindus, are remarkably similar to those of the Mexicans in some leading particulars; (*Asiat. Res.* vii. 309. *Ward's View of the Hindus*, i. 173,) and which to avoid a tedious description we shall but recapitulate.

The bridegroom goes in procession to the house of the bride's father, and is there welcomed as a guest. The bride is then given to him in the usual form of any solemn donation, and their hands are bound together with grass; the bridegroom then clothes the bride with an upper and lower garment; *then the skirts of their mantles are tied together*, the bridegroom makes oblations to the fire, and the bride drops rice upon it, and after several inconsiderable ceremonies, the company is dismissed; the marriage being now complete and irrevocable. In the evening of the same day the bridegroom points out to her the pole star, as an emblem or figure of constancy; *during the three subsequent days, the married couple must live chastely and austerely*; and after these three days, which is *the fourth from the celebration of the marriage ceremony*, the bridegroom conducts the bride to his own house.

The custom of tying the garments of the bride and bridegroom together, was also practised in the marriages of the ancient Persians, (*Hyde de Religio Vet. Pers.* 405.) "Sponsi sponsæque vestium extremitatibus sibi invicem consutis et colligatis, eos circumagunt et circa ignem ducunt cum festivitate et epulis," and as it is no bad emblem of their new condition, it is rather surprising that this particular custom has not been more widely adopted. But we cannot find any evident reason, why some nations have, like the Mexicans, deferred the consummation of marriage until four days had elapsed. Abu'l Ghazi (*Hist. Tartars*, ii. 483.) says, it is the custom of the Bucharian bridegrooms, to lay down on the bed of the bride for a few moments, in the presence of the wedding guests for three successive evenings; but the marriage is not consummated till the fourth day.

The ceremonies made use of by the Mexicans on the birth of a child, were certainly religious; but are too unin-

teresting to be detailed, though we must confirm the truth of the analogies remarked by Governor Raffles, (*Hist. Java.* i. 324.) to exist between the Mexicans and Javanese, in their practices on such occasions.

The children of the Mexican kings and nobility, were most generally educated in their monasteries and temples under the tuition of the priests; to whose charge they were consigned after their fifth year. (*Clavig. Hist. Mex.* ii. 112.) In these schools the sexes were educated apart.

Plebeians might also send their children to these places of education and religion, but they were separated from those of the nobility.

In these seminaries they generally remained until they were old enough to marry, and which ceremony usually took place on their quitting the temple.

The Mexicans disposed of their dead either by burial or burning, the last of which was the general practice. Indeed, burial appears to have been restricted to those persons who had been drowned, or had died of dropsy, and some other diseases. (*Clavig. Hist. Mex.* ii. 108.) We have no reasons assigned for these exceptions.

The corpse was dressed in the habits and insignia of the deity who was supposed to have patronised the art or profession of the deceased. The arms, utensils, &c. that he had used during life, were disposed around him, and an animal resembling a dog, called by them *techichi*, was killed to accompany, or rather to guide him through certain dangers, to which the soul was exposed in its journey to the world of spirits. The priests also gave the dead man several pieces of paper, which were to serve as passports or charms, against other dangers, that obstruct that mysterious road, along which the dead alone can pass. These dangers were from mountains that clashed or fought with each other, great serpents, crocodiles, deserts, piercing cold winds, &c.

The same disposition of the corpse was made, whether the body was buried or burned. In the former case it was deposited in the ground in a sitting position, with those matters around, which a pious superstition taught them to believe would be serviceable to the dead in his futur estate of existence. If the body was burned, the ashes were collected into an earthen pot, in which was deposited a gem, which they believed would serve the deceased as a *heart* in the next world. This urn was buried in a deep ditch, and eighty days after inhumation, they offered over it oblations of meats and drinks.

There was no appointed place of interment, for some

were buried near the temples, others in the fields and mountains; and the kings and chiefs, frequently directed their ashes to be preserved in the sanctuaries of the temples.

Such were the funeral ceremonies used by the common people; but on the death of their kings and nobility, additional forms were observed; which we do not deem necessary to describe, further, than they put slaves or servants to death, sometimes in great numbers, to attend these barbarian lords in the future world. They killed the *techichis* as already described, and supplied the ashes with the gem for a heart in like manner.

Most of the ceremonies used at the Mexican funerals, have been practised among rude nations in every part of the world; and the custom of depositing a stone or jewel with the remains, to answer the purpose of a heart, whimsical as it may seem, appears to have been equally the custom of some nations of the Eastern continent: Thus the Hindoos to this day, enclose a stone with the ashes of their dead,* apparently to this intent.

Mr. Pegge, in his observations on the Staunton Moor urns, (*Archæologia*, viii. 58,) remarks, that in these druidical monuments, which all contain burned human bones, is found a substance supposed to be mountain pitch, which is cut into the shape of a *heart*, and which it may be presumed was enclosed from superstitious motives, analogous to those of the Mexicans.

Of the Mexican Wars.

Previous to declaring war, an embassy of three or four noble and eloquent persons were sent to the hostile party, either to obtain redress, or to make demands. These ambassadors wore dresses and certain insignia, that manifested their character; and by the national law of Anahuac, their persons were inviolable, provided they did not leave the high-way.

If no accommodation took place, they declared war, which was formally notified to the enemy by sending them several shields, &c.

The Mexican army was composed of several corps of men which the Spaniards called companies, though they consisted of two or three hundred warriors. In a large army there were three grades of officers superior to the commanders of the companies, and inferior to the general in chief; but their particular duties are not known at the present time.

The discipline of their troops was strict; they marched

* I have mislaid my authority for this fact, but believe it to have been one of the volumes of the Asiatic Researches.

and fought in close order, and it is said, they punished with death those who engaged the enemy without permission.

Clavigero (*Hist. Mex.* ii. 170,) says a body of men during their battles, was stationed to act as a *corps du reserve*. He says in another page, that among the nations of Anahuac, the first battle was usually fought in a field appointed for that purpose.

Though each company had its own standard, there was one which was considered the general standard of the army; and which appears to have been commonly tied to the back of the commander.

These standards resembled the Roman *signum*, being staves of about eight or ten feet in length, on which the insignia of the state, made of gold, feathers, &c., was placed. That of the Mexicans, according to Clavigero, was an eagle darting on a tiger; but I am inclined to think, there must be an error in our English translation of his history in this particular; as an eagle devouring a serpent, was properly the arms or insignia of the Mexican nation.

The chief object of their soldiers was to make prisoners, whom they afterwards sacrificed to their gods according to their bloody rites; and those persons were rewarded, who had taken the greatest number of prisoners.

It does not appear to me, that the Mexicans took any particular trophy from the dead. On one occasion, they cut off the ears of those they made prisoners during a battle; (*Clavig. Hist. Mex.* i. 159,) but which practice does not appear to have been ever repeated.

A prisoner that had been captured by a king, after he had been sacrificed to the gods of Mexico, was skinned with the head entire, and being stuffed with cotton, was hung up in some conspicuous place: but this custom seems to have been restricted to kingly triumphs, as a kind of "*spolia opima*."

Clavigero (*Hist. Mex.* ii. 161,) relates, that military decorations of three different kinds, were given to those persons who had distinguished themselves in war; and which entitled them to certain privileges ever afterwards in the kingdom. They were severally called princes, eagles, and tigers.

The weapons used by the Mexicans, were the bow and arrow, slings, clubs, spears and darts, which last were thrown with a strap, (*Herrera*, ii. 301,) as was anciently the practice with the Greeks. They also made use of a weapon called by them *Maquahuill*, and by the Spaniards a sword. It was a stout stick about three and a half feet in length, armed on two opposite sides with sharp pieces of flint or obsi-

dian.* The blows with this weapon when first manufactured, were equal to those made with the Spanish sword; but a little use destroyed its effect other than as a club. They also used the *macana*, serrated with flints in this manner. (*Herrera*, iii. 265.)

Their spears were sometimes eighteen feet in length, and were armed with pieces of copper, flints, sharp bones, and sometimes were hardened by a partial burning in the fire.

Their martial music was made with drums, trumpets, and sea shells, with which they made a great noise, and by which they partly regulated their movements in time of action.

To defend their bodies in time of battle, they carried shields made from various materials, and of different sizes; some of which were large enough to cover the whole person. They also wore an armour made of quilted cotton, which covered the body, thighs, and upper part of the arm. This was sufficient proof against arrows, and was adopted by the Spanish conquerors in their wars with the Mexicans. On this armour, decorations of feathers, jewels, gold, &c. were ostentatiously displayed, according to the ability of the soldier. In a few instances they appear to have used cuirasses made of plates of copper or silver, but they were of rare occurrence.

On the head, they wore a helmet made of wood, or other material, and generally fashioned to represent the head of some ferocious animal, with expanded jaws and large teeth.

Such was the armour and dress of soldiers of some rank and consideration; the common class of warriors were nearly naked, and made up in paint, what was wanted in defensive armour.

The Mexicans and Acolhuans had hospital establishments, provided for the reception of those persons, who had become disabled in war, or had grown superannuated in civil employment. Such persons were sent to the cities of Colhuacan and Tezcucó, where they were for the remainder of their lives provided for by the king. (*Clavigero, Hist. Mex.* i. 289, 315.)

We have no good description of their military fortifications; Clavigero relates, that they defended themselves with walls, ramparts, breast-works, palisadoes, ditches and entrenchments; but he nearly confines himself to this bare enumeration.

Their walls were strong and sometimes of considerable ex-

* The natives of the Sandwich islands, (*Cook, Voy. N. H.* ii. 348,) used an instrument like that of the Mexicans, its edges being serrated with shark's teeth. It was, however, of much smaller size, being only about a foot in length.

tent. The one built by the Tlascalans to protect their country from Mexican invasion, was six miles in length, eight feet high, besides the breast work, and eighteen feet thick. It was made with stone and a strong cement of lime.

Their ditches were deep and wide, so that drawbridges were necessary to pass them. It was this species of defence, that so long preserved Mexico against the attempts of Cortez and his numerous Indian allies.

Of the Astronomical System of the Mexicans.

Before we proceed to discourse concerning the Mexican astronomy, it seems proper, that we should make a few brief observations upon the hieroglyphical system, by which their computations and observations have been preserved until the present time.

It is well known that the Toltecas, Mexicans, and other nations of Anahuac, were unacquainted with the art of alphabetical writing. To supply the want of that admirable invention, they drew pictures, representing the historical events they wished to perpetuate, in a manner analogous to the plates, or engraved illustrations of our more popular writings. So far as a simple drawing could perpetuate an event, this method, though tedious, is sufficiently intelligible: but when the deeds of nations were to be recorded, or those of particular individuals illustrious for their virtues or achievements, their drawings became comparatively more intricate; for they designated the personages that appear in their paintings, by arbitrary marks or drawings, that either expressed their names phonetically, or else characterized them by a special device, which though at first of arbitrary use, had become by long practice universally understood.*

To express the chronology of their history, they designated along the margin of their books, hieroglyphical representations of their years, as they followed each other in regular cyclic succession; to any one of which was connected a pictured representation of the event to be recorded, as having happened in that particular year.

At the time of their subjection to the Spaniards, their system of hieroglyphic or rather picture representations, was evidently becoming more abstract; for they had begun to abridge their drawings, by representing only such parts of the object as was necessary to make it understood; and

* Boturini is said to have found a quippos among the Tlascalans, the threads of which had been nearly destroyed by time. (*Clavig. Hist. Mex.* ii. 225.) I think it more probable this was a simple wampum belt, which they had received in some treaty with the northern barbarous Indians.

for certain abstract things, they had devised special hieroglyphics sufficiently intelligible. In this manner they designated the heavens, the earth, air, water, day, night, midnight, the year, &c., so that in all probability in the course of time, if they had continued unknown to European cupidity, they would have brought their hieroglyphic system into one analogous to that of the Chinese.

The numerals were expressed as far as 19, by as many round dots; the number twenty was represented by a particular figure. The next hieroglyphic numeral denoted 400, and the fourth, which completes all that we now possess of their system of notation, represented 8000. With these arithmetical hieroglyphics, repeated as often as necessary, it is evident that any number may be expressed; though it is not improbable, they had other marks of greater numerical power, than the highest we have mentioned.

By the methods we have thus described, they represented the history of their kings, designating the events of the year according to time and place, in accurate chronological order. And in a manner a little more artificial, they recorded the facts and principles of their astronomy, their religion, law, and moral economy. These pictured books are not very difficult to interpret with a moderate study of some elementary principles, and notwithstanding the vast quantity of them, destroyed by the brutal fanaticism of the Spanish conquerors, a sufficient number yet remain to establish those facts, which we shall presently introduce to the reader's attention; and which have been derived from the writings of Acosta, Clavigero, Humboldt, and others.

The Mexicans computed time, by two calendars of different construction; one of these called *Reckoning of the Sun*, was used for civil purposes, the other, or *Reckoning of the Moon*, was employed in regulating their religious festivals.

To convey as distinct an idea as possible of Mexican astronomy, we must describe the two calendars separately; and first of the civil computation, or RECKONING OF THE SUN.

Their civil year consisted of three hundred and sixty-five days, and was divided into eighteen months, of twenty days each. To the eighteenth or last month, the five epagomenes were added, which, as they did not belong to any month, were called by them *nemontemi*, "void or useless days."

But as the tropical year is nearly six hours longer than three hundred and sixty-five days, the Mexicans lost a day every four years. Though they were aware of this circumstance, they disregarded it until their cycle of fifty-two

vague years had expired, by which time they had lost thirteen days: they then intercalated that number of days, before they commenced another cycle of fifty-two years.

From this statement it will be seen, that the year commenced differently every fourth year of the cycle of fifty-two vague years; so that the first year, commenced according to our time, on the ninth of January, but the last year of the cycle began on the twenty-seventh of December.*

The eighteen months of the year had each a particular name; derived from some peculiar festival or employment, or from some bird, plant, or fruit, whose appearance was expected at certain seasons. We shall not enumerate them, as in the Mexican language they would be unintelligible, and it is out of our ability to translate them without some commentary; which would add unnecessarily to the discussions of this chapter. But we must observe, that each month, had its own characteristic hieroglyphical mark.

The twenty days of the month, had each their specific name, also expressed by a regular hieroglyphic for each day, and we must also observe, that the same names for days, belonged to every month of the year; a circumstance that occasioned no confusion, as the name of the month was always used in connexion with that of the day.

Each month was divided into four periods of five days each, and on every *fifth* day, they held their markets or fairs.

The day commenced with sunrising, and was divided into eight portions of time, a division recognised by the Hindus, Romans, &c.

We must now observe, that the Mexicans did not reckon the chronological events of their history, from century to century, as is the practice of European nations; but according to the particular years of a cycle, containing *fifty-two* years.

This period of fifty-two years, was called by them *Xiuhmolpilli*, and two of them formed another cycle called *Cehuehuetiliztli*, a duplication, that is observed by many writers upon Mexican antiquities, and which it is of some importance to remember. But to avoid the repetition of such long and unusual words, we shall speak of them as all writers have done preceding us, by calling the first a *half* century, and the latter a *century*.

* Though I have followed Humboldt, or rather Gama, in this statement of the commencement of the year, I am far from being satisfied of its correctness. There is a great discrepancy among the Spanish writers on this point; and considering the exactness of the Mexican astronomy in all its particulars, I am inclined to think that the *first* year of the cycle of fifty-two years, commenced nearer the winter solstice, or twenty-second December.

It has been already stated, that the civil year of the Mexicans was a vague year of 365 days; and that consequently they lost near *six hours* annually in their computation. At the end of their cycle of fifty-two years, these hours amounted to nearly thirteen days, which they then added to the fifty-two vague years, and thus adjusted their time to the tropical course of the sun. To this account we have only to add at present, that the cycle of fifty-two years was divided into four parts, each called *Tlapilli*, and containing *thirteen* vague years.

The manner by which they enumerated the different years, composing the cycle of *fifty-two years*, was by a periodical series of two different sets of hieroglyphics; one of which consisted of four figures or hieroglyphics, and the other of thirteen round dots or marks, expressing numerals from one to thirteen; which it will be seen can never coincide together, but once in fifty-two permutations.

The four hieroglyphics we have mentioned, were in the Mexican language, *Tochtli* a rabbit; *Acatl* a reed; *Tecpatl* a flint; and *Calli* a house; which invariably follow each other in the order we have enumerated them. Each expresses one year. But as they are accompanied by the numerical dots, it will be seen that no one hieroglyphic is attended with the same number of dots.

To shew the peculiar composition of the cycle of fifty-two years, we shall exhibit in a tabular view the two series of hieroglyphic characters in their regular order of permutation. The words *tochtli*, *acatl*, &c., represent the figures of the rabbit, reed, &c., as depicted by the Mexicans; and the cyphers made with types of a "broad face," represent the number of dots or rounds, as they counted them from one to thirteen. The particular year of the cycle is shown by ordinary cyphers.

A MEXICAN CYCLE OF FIFTY-TWO YEARS.							
1st Tlalpilli.	Year of Cycle.	2d Tlalpilli.	Year of Cycle.	3d Tlalpilli.	Year of Cycle.	4th Tlalpilli.	Year of Cycle.
1 Tochtli.	1	1 Acatl.	14	1 Tecpatl.	27	1 Calli.	40
2 Acatl.	2	2 Tecpatl.	15	2 Calli.	28	2 Tochtli.	41
3 Tecpatl.	3	3 Calli.	16	3 Tochtli.	29	3 Acatl.	42
4 Calli.	4	4 Tochtli.	17	4 Acatl.	30	4 Tecpatl.	43
5 Tochtli.	5	5 Acatl.	18	5 Tecpatl.	31	5 Calli.	44
6 Acatl.	6	6 Tecpatl.	19	6 Calli.	32	6 Tochtli.	45
7 Tecpatl.	7	7 Calli.	20	7 Tochtli.	33	7 Acatl.	46
8 Calli.	8	8 Tochtli.	21	8 Acatl.	34	8 Tecpatl.	47
9 Tochtli.	9	9 Acatl.	22	9 Tecpatl.	35	9 Calli.	48
10 Acatl.	10	10 Tecpatl.	23	10 Calli.	36	10 Tochtli.	49
11 Tecpatl.	11	11 Calli.	24	11 Tochtli.	37	11 Acatl.	50
12 Calli.	12	12 Tochtli.	25	12 Acatl.	38	12 Tecaptl.	51
13 Tochtli.	13	13 Acatl.	26	13 Tecpatl.	39	13 Calli.	52

By this table it will be seen, that the four hieroglyphics *Tochtli*, (rabbit) *Acatl*, (reed) *Tecpatl*, (flint) and *Calli*, (house) though constantly repeated in succession, never occur twice in the cycle of fifty-two years joined with the same numerical dots; for the series of 4×13 , cannot coincide oftener than once in fifty-two revolutions. When an event occurred according to the Mexican phrase in 1 *Tochtli*, it was the same, as saying in the first year of the cycle; if in 5 *Tochtli*, which is the next time that hieroglyphic occurs, it was the fifth year; 9 *Tochtli* the ninth; 13 *Tochtli* the thirteenth; 4 *Tochtli* the seventeenth; 8 *Tochtli* the twenty-first year; and so on; as any one may understand by the inspection of our table.

The numerical dots are not used beyond the number *thirteen*, and when the series had extended thus far, the FIRST TLALPILLI had expired, which it does with 13 *Tochtli*. The SECOND TLALPILLI, begins with 1 *Acatl*, and terminates with 13 *Acatl*. The THIRD TLALPILLI, begins with 1 *Tecpatl*, and uses the numerical dots in like manner to 13 *Tecpatl*; and the FOURTH TLALPILLI, begins with 1 *Calli*, and ends with 13 *Calli*. With this last, the *Xiuhmolpilli* or cycle of fifty-two years terminated. Then followed the *thirteen intercalary days*, expressed by that number of round dots, which compensate for the six hours they had annually lost, since the commencement of the cycle. After they had run out, a new cycle commenced with 1 *Tochtli*, &c. &c., as we have just shewn.

By the above statement it will be seen, that the years of different cycles of fifty-two years, might be confounded together, unless their system also distinguished each cycle by some distinct hieroglyphic mark. The Abbé Clavigero thought, that the method by which this confusion was avoided, has been lost to us; but Humboldt (*Research. i. 300*) tells us, that they distinguished their cycles from each other by numerical dots. "Thus the hieroglyphic of the *Xiuhmopilli*, followed by four rounds, (or dots,) shewed the Mexicans that four cycles of fifty-two years had elapsed from the Sacrifice at Tlalixco:" an epoch in their history, from whence they made their chronological computations.

We now pass to the description of the Religious Calendar, or RECKONING OF THE MOON.

This Calendar, which was used by the priests for the regulation of their festivals, presents a series of *periods of thirteen days*, formed by the periodic alternation of thirteen numerical dots, and the twenty hieroglyphics of the days of the months, by which a cycle of 260 *days* is formed, for $13 \times 20 = 260$. This period has been called their Religious Year.

Seventy-three cycles of 260 days, amount to 18,980 days; which is precisely the number contained in the half century of 52 years, in which great cycle, both their civil and religious computations terminate.

As these two calendars have been evidently framed to gratify a superstitious fancy in the use of particular numbers, we beg leave to call the reader's attention to the various numbers. Their cycle of fifty-two years, was divided into *four* periods of *thirteen* years; *thirteen* months of *twenty* days, formed their religious cycle of 260 days; and periods of *thirteen* days, constitute the smallest reckonings of their Religious Calendar.

Each *tlapilli*, or period of thirteen vague years, also contains three hundred and sixty-five periods of *thirteen* days.

The Civil Year contained *eighteen* months, of *twenty* days, each divided into *four* weeks, or periods of *five* days.

The cycle of fifty-two years, was divided into *four* periods of thirteen years, as before stated; but it was further divided into thirteen periods, of *four* years each. At the commencement of these quadriennial cycles, they made extraordinary festivals; and the whole fourth year was called a divine year. It always bore the sign of the *rabbit*.

The number *seventy-three*, occurs but in one instance; but as we are of the opinion, that they had particular reasons for using it, which we shall hereafter shew; we must

call the attention of the reader to the fact, that *seventy-three* periods of 260 days, equals the days of the cycle of fifty-two years; a circumstance remarked by Clavigero. (*Hist. Mex.* i. 334.)

Before we proceed in our discussion concerning the principles of the Mexican astronomy, we must observe, that Baron Humboldt has made us acquainted with a particular series in alternation with the numbers 13×20 composing the *cycle of 260 days*; which we purposely omitted describing when speaking of that cycle; because we cannot give an unhesitating assent to the explanation of its use as conjectured by him.

This third series, known by the names of *Lords of the Night*; consists of nine hieroglyphics. It has been overlooked by Europeo-Mexican antiquaries, until the late Mr. Gama, a celebrated Mexican astronomer, made them known a few years since; and as far as we know, alone by the medium of Humboldt's writings.

It is said by this eminent traveller, (*Res.* i. 314,) that the use of the *Lords of the Night*, arises from the following circumstance. The cycle of 260 days is composed from the periodic alternations of 13 and 20, or $13 \times 20 = 260$; but as the civil year contained 105 days more than the cycle of 260 days, it might happen, that some confusion would ensue upon the repetition of the same terms for the remaining 105 days of the year; and that to avoid this source of confusion, they used in connexion with the terms 13 and 20, *nine* hieroglyphics, which render it impossible, that the three series can coincide twice in the same year. He further observes, that the Mexicans appear to have chosen the number *nine*, from the facility with which it is divided forty times into 360 days.

It is with great diffidence, that I venture to dissent from so great an authority as Baron Humboldt; but when the great exactness and care, manifest in the construction of the Mexican cycles is taken into consideration, it seems to me impossible, that in the use of the *Lords of the Night*, they should abruptly terminate a cycle with 360 revolutions, whose natural period of termination, is evidently 2340 days; for $13 \times 20 \times 9 = 2340$. It is true, Baron Humboldt states, that the series of the *Lords of the Night*, were not used with the *nemontemi* or *epagomenes* of the Mexican year; and in this I presume lies the error: for undoubtedly the cycles of 260 days constantly succeeded each other, until the half century of 52 years closed; without any regard of the *nemontemi*, which belong alone to the civil computation.

I incline therefore to the opinion, that there has been some defect, in the information the Baron received from Gama's discovery, and believe that the Lords of the Night, were used in connexion with the cycles of 260 days, in order to throw them into the larger cycles of 2340 days, of which eight, with the addition of one of 260 days, constitute the cycle of 52 years.

I might support this opinion with arguments drawn from other analogies of the Mexican astronomy, but am too fearful of expressing myself upon a subject, where all the knowledge I possess, is drawn from the brief statement of Baron Humboldt. If what has been said, will induce a more rigorous examination of this third series, my purpose will be answered.

From what has been observed concerning the Mexican calendars, it is evident that they have been all constructed to complete or extend the cycle of 52 years, whose peculiar intercalation testifies, that the knowledge possessed by this people of the length of the tropical year, was surprisingly accurate. It is undeniable, at any rate, that their error was greater than $11' 12''$, but if we adopt the account derived from Gama; (*Humboldt, Res. i. 390.*) it will follow, that they estimated the tropical year at $365^d. 5^h. 46' 9''$; which will be but $2' 39''$ different from the most accurate European observations, which state its length to be $365^d. 5^h. 48' 48''$.

The intercalation of *thirteen days* to 52 vague years, estimates the year to be 365 days, 12 hours; but it is more than probable, that the Mexicans ingeniously intercalated but *twelve days and a half* to their cycle of 52 years, which will give a duration of $365^d. 5^h. 46' 9''$ to each year. In either case, the approximation to real time is surprising; and as the investigation is highly interesting, we will endeavour to establish the fact, that they intercalated but $12\frac{1}{2}$ days.

If the Mexican year was estimated at 365 days, 6 hours, it is apparent, that from the time their calendar was reformed at Tlalixco,* A. D. 1091, to the time when the Spaniards invaded Mexico, A. D. 1519, there must have been an error of more than three days in time. But from the calculations made by Gama upon eclipses,† and records of the days when the sun passes the zenith of Mexico, preserved in the Mexi-

* This epoch was the foundation of the Mexican chronology, from which was counted all the events of their history, according to the number of cycles of 52 years, that had elapsed since that time; which was their first arrival in Anahuac.

† We may observe, that the Mexicans understood the causes of eclipses, as may be seen in the hieroglyphics published by Clavigero and Humboldt, where the disks of the sun and moon are projected on each other at the times of such phenomena.

can hieroglyphic paintings, as well as upon remarkable events occurring during the time of the conquest, no such error of three days could be detected.

Now as it does not appear in the Mexican history, that any reformation was made of their calendar since the memorable one at Tlalixco, and that the thirteen intercalary days were regularly added to the end of every cycle of 52 years, it will follow almost conclusively, since no error can be observed during the lapse of four centuries, that Gama was correct in his statement, that the Mexicans intercalated but *twelve days and a half*, at the close of their cycles of fifty-two years. This he thinks was accomplished in the following manner. He supposes the Secular Festival, every 52 years, was celebrated day and night alternately; i. e. if the years of one cycle of 52 years began at midnight, the following cycle began at noon; and thus though nominally thirteen intercalary days were interposed between the two cycles, in reality there were but twelve and a half.

This fact he considers may be deduced from the Spanish writers of the sixteenth century; but we are unacquainted with all his arguments upon this point.

Baron Humboldt, from whom we have derived the foregoing information, (*Res. i. 391.*) declares himself incompetent to decide positively on the fact of the intercalation of $12\frac{1}{2}$ days, from an ignorance of the Mexican language, in which tongue most of the authorities to which Gama refers are written. He therefore postpones the establishment of the point in question, until that astronomer's treatise upon Toltect and Mexican chronology be printed. But he passes a high encomium upon Gama's industry, perseverance, and accuracy in astronomical science, which indeed he had himself verified; and he further declares, that Gama's opinions ought to inspire great confidence; that he would never have lightly hazarded an hypothesis, had he not been led to it by a careful comparison of dates, and the study of hieroglyphic paintings.

Though there is every reason to believe, that Gama is correct in his supposition, for he was not only an able astronomer, but well acquainted with the Mexican hieroglyphic paintings, as well as their language; yet we have circumstantial evidence from another quarter, which seems to declare expressly that the Mexicans knew the correct length of the tropical year, to within a very small fraction. This information, as we receive it at second hand, we shall relate in the words of Humboldt (*Res. i. 395.*) "On opening at Rome the Codex Borgianus of Veletri, I there found the cu-

rious passage from which the Jesuit Fabrega concluded, that the Mexicans had knowledge of the real duration of the tropical year. Twenty cycles of 52 years, or 1040 years, are there indicated in four pages: at the end of this great period, we see the sign rabbit, *tochtli*, immediately precede among the hieroglyphics of the days, the sign bird, *cozquauhthli*; so that seven days are suppressed: viz. those of *water*, the *dog*, *ape*, *grass*, (*malinalli*) the *reed*, *jaguar*, and *eagle*. Fabrega supposes in his manuscript commentary, that this omission refers to a periodical reform of the Julian intercalation, because a subtraction of seven days, at the end of a cycle of 1040 years, reduces, by an ingenious method, a year of 365.25 days, to a year of 365.243 days, which is only 1' 26"* greater, than the real mean year, as it is laid down in the tables of Delambre."

"After the examination of a great number of hieroglyphic paintings of the Mexicans, and having seen the extreme care with which they are executed in the minutest details, we cannot admit, that the omission of seven terms in a periodical series, is owing to mere chance. Fabrega's observation, without doubt, deserves notice here; not that it is probable, that a nation should in reality employ a reform of the calendar only after long periods of 1040 years, but because the manuscript of Veletri seems to prove, that its author was acquainted with the real duration of the year."†

Thus we have shewn from two different sources of computation, with every appearance of truth, that the Toltecs or Mexicans, or from whomsoever their astronomical system was derived, did know previous to the Spanish conquest, the

* If I am correct in my calculation, the Mexican year was somewhat longer than stated by Baron Humboldt; or 1' 30" 27'", instead of 1' 26", as printed in the English translation.

† While calculating the elements laid down by Humboldt from Fabrega as above quoted, I was struck with the following circumstances, which are deemed of sufficient importance to lay before the reader. Estimating the Mexican year at 365 days, 6 hours, as the intercalation of 13 days every 52 years will require, it will be seen, that the 6 hours of excess for each year of the period 1040 years described by Fabrega, will amount exactly to 260 days. Now as the period of 260 days, was an important one in the Mexican computation, it occurred to me, that there might be a greater cycle recognised in their astronomical system than we were aware of, to which 260 days would be as an intercalation. On reducing the 1040 years to days, which amount to 379,600, exclusive of the 6 hours of annual excess, and dividing by the cycle of 260 days, it will be found that this cycle is contained 1460 times in 1040 years: if to this we add the intercalary days, the number will be 1461; which is the number of the Sothic period.

This circumstance I think tends to prove, that the numbers 1460 and 1461, were not of accidental use among the Mexicans, as Humboldt has already supposed, on finding it in the number of half lunations or periods of 13 days, which compose the cycle of 52 years. (*Humboldt, Res. i. 296, and ii. 226, for observation of Jomard.*)

true length of the tropical year to an immaterial fraction. The singular train of ideas to which this circumstance gives rise, we must defer investigating, until we have prepared our way by some examination of the astronomical systems of the eastern continent; when we shall be enabled to appreciate the Mexican calendars to much greater advantage.

I am unacquainted with any division of time, analogous to the civil calendar of the Mexican year, which consisted of eighteen months, or rather periods of twenty days each. But however differently the nations of the eastern continent may now arrange their months, in comparison with those of the Mexicans, yet I think it not improbable, that anciently they did arrange them after a more analogous system. This may be inferred, from finding the week of *five days* in use among certain people of India, the Indian islands, &c., which as far as I have been able to examine, are very ancient periods of time, not belonging to the calendar arrangements at present recognized by them.

To exhibit this subject in its strongest light, we must repeat, that the Mexican months of twenty days, were divided into four weeks of *five days* each, and on the first day of each week was held their market or fair. (*Clavigero, Hist. Mex. i. 335, Appendix.*)

As an analogous period of time, we observe, that in the institutes of Menu, (*Sir Wm. Jones's works*, vii. 296,) it is directed, "once in *five nights*, or at the close of every half month, let the king make a regulation for market prices in the presence of experienced men."

If any thing be considered ambiguous in the above expressions, it is completely elucidated by the following quotation from Raffles, (*Hist. Java*, i. 475,) confirmed by Crawford. (*Ind. Archip. i. 289.*) "The Javanese have a week of *five days*, which is common throughout the country, and by which the *markets* are universally regulated; this week is by far the most ancient, as well as the most generally adopted among them."

I know of no other people with whom this period is in use,* excepting those of Benin in Africa, which is thus described. (*Mod. Univ. Hist. xiii. 292.*) "The sabbath, or day of repose with the people of Benin, returns every *fifth day*, which is celebrated as a festival, with sacrifices, offerings, and entertainments."

It would be a curious matter to ascertain if possible, the evolution of these periods of five days among these different

* Did the Chinese anciently reckon time also by periods of five days? Morrison, (*Chinese Dict. i. 49.*) says, they call the fifteenth night of the moon, "third fifth."

nations, and learn what greater periods they compose; which I entertain the hope, some reader of this page may be enabled to execute from a local opportunity.

Of more doubtful inference we also observe the following peculiar expression in the Havamaal or sublime discourses of Odin. (*Mallet's North. Antiq.* ii. 210.) "Peace among the perfidious continues for *five nights* to shine bright as a flame, but when the sixth night approaches, it waxes dim."

Now if there was such a week in use, we can see the propriety in adopting the sentiment of Odin to the shortest acknowledged period of time, and which would be the natural thought of any person discoursing on such a subject; and if it is remembered, that the most approved theory supposes, that both the Edda and Odin himself came from Asia, where we have shewn the week of five days was in common use, there is no improbability of its having been thus carried to Scandinavia.

It is also probable, that the Etruscans recognized periods of five days; for we find that after the death of Romulus, (*Livy, lib. i. cap. xviii.*) the senate were divided into bodies of ten members, who administered the government for *five days* at a time, in regular rotation for a whole year. This feature in the appointment of an inter-*rex*, was ever after maintained.

We may also call to the reader's recollection, that the *nones* of the Roman months for eight out of the twelve, were on the fifth day.

Almost all the nations of antiquity, reckoned their years to contain three hundred and sixty days, to which five *epagomenes* were added.

An institution decidedly analogous to the astronomical calendar of the Mexicans, is to be found in the cycle of sixty years, used by the Hindus, Chinese, and the Indo-Chinese nations generally, for their chronological computations.

To exhibit these features of resemblance, we shall throw into a table the cycle of sixty years as used by the Chinese; which is framed by the periodic alternation of two sets of characters, one called by them the ten stems, *shih-kan*, and the other, the twelve branches, *te-che*. (*Morrison's View of China*, 3.) These two series we shall represent, one by the Roman, the other by arithmetical numbers.

THE CHINESE CYCLE OF SIXTY YEARS.											
	Year of Cycle.		Year of Cycle.		Year of Cycle.		Year of Cycle.		Year of Cycle.		Year of Cycle.
I	1	I	3	I	5	I	7	I	9	I	49
II	2	II	4	II	6	II	8	II	10	II	50
III	3	III	5	III	7	III	9	III	11	III	51
IV	4	IV	6	IV	8	IV	10	IV	12	IV	52
V	5	V	7	V	9	V	11	V	13	V	53
VI	6	VI	8	VI	10	VI	12	VI	14	VI	54
VII	7	VII	9	VII	11	VII	13	VII	15	VII	55
VIII	8	VIII	10	VIII	12	VIII	14	VIII	16	VIII	56
IX	9	IX	11	IX	13	IX	15	IX	17	IX	57
X	10	X	12	X	14	X	16	X	18	X	58
XI	11	XI	13	XI	15	XI	17	XI	19	XI	59
XII	12	XII	14	XII	16	XII	18	XII	20	XII	60

I have thrown this table into form, by using the *twelve branches* as the first series, which more distinctly shews the five cycles of twelve years, of which this greater one is composed, and by which so many nations of Asia compute their time. These cycles of twelve years, are precisely analogous to the *Tlalpilli*, or cycles of thirteen years used by the Mexicans; and any one comparing the Mexican cycle (page 205,) with that of the Chinese, will at once perceive the great points of resemblance that characterize their construction.

This cycle of sixty years, or that of twelve, its fifth part, is in exclusive use from Hindostan to Japan, in estimating the chronology of their history; and I presume, there is little evidence wanting to prove, that it anciently extended all over Asia. In the course of time, and the revolutions of empires, many changes and modifications have occurred, by which the peculiar composition of this cycle has been altered or mutilated, though it still preserves those features of identity, by which it can be easily recognized.

Some of the eastern nations, apply the names of the Zodaical signs to their cycle of *twelve years*, (*Raffles, Java*, i. 478,) which they at present do not understand as having any reference to the apparent motion of the sun. Among others, as the Japanese, Tartars, &c., the *twelve years* are known by the names of animals, whose character do not

imply any astronomically significant use.* These different people when speaking of any event of past history, express themselves as in the following instance; (*Abul Ghazi*, i. 146.) "Gengis Khan was born in the year of the Hegira 559, called the *Hog*, was proclaimed Khan in the same year of the *Hog*, and died in the 624th, which the Mongols call the *Hen*, having lived 65 years, &c."

We must observe, that there is a departure in the strictness of analogy, between the Mexican cycle and that of the Asiatic nations in their subdivisions; for the first divides into fourths, and the latter into fifths. This discrepancy which we think we shall be able to account for, at least in part, in the ensuing pages, is of no material importance, as affecting the general analogies of the two systems; and we should not have taken this notice of it, but to introduce the conjecture, that possibly some of the western Asiatic nations, did anciently divide the cycle of sixty years into fourths, or periods of *fifteen years*, and from this source it became introduced into the Roman computation, as the *Indiction*; a period of time whose origin has so much puzzled legal antiquarians.

The only certain point in the history of the Indiction, I believe is, that it was never heard of until the seat of Roman empire was established at Constantinople; and there bordering on Oriental kingdoms, whose computations were so much regulated by such cycles, the Romans became acquainted with the period, or else they invented it in imitation of the cycle of twelve years, which we have every reason to believe once prevailed all over the east.

Though we have some important observations to make both upon the Mexican cycle of fifty-two years, and that of the Asiatics of sixty years, we must for a time omit their consideration, until we have brought the religious calendar and its analogies, to the same point where we now leave the civil computation: for as they both terminate in the same period or cycle of 52 years, our reasoning upon that cycle can then be more clearly understood.

The religious calendar, as already described, page 206, was composed of small periods of *thirteen days*, twenty of which made the cycle of 260 days; and of these last periods, *seventy-three* made the great cycle of 52 years, or 18,980 days.

* The names of the years among the Japanese and Tartars are as follow:

- | | |
|---------------|---------------|
| 1. the Rat. | 7. the Horse. |
| 2. " Ox. | 8. " Sheep. |
| 3. " Tiger. | 9. " Ape. |
| 4. " Hare. | 10. " Hen |
| 5. " Dragon. | 11. " Dog |
| 6. " Serpent. | 12. " Hlog. |

What it was, that established the predilection for the period of *thirteen days*, as well as for the number *thirteen*, which is involved with so much ingenuity into various cycles and combinations, belonging to their period of 52 years, is no easy matter to determine. The solution of this question has from a faint analogy, been referred to a rude attempt to divide the moon's revolutions into halves; but it seems an insurmountable difficulty to reconcile this imperfect idea of a lunation, with the precise and accurate knowledge of celestial motions, they have displayed in every other part of their astronomical calendars. But as some distinguished writers have expressed themselves favourable to such a conjecture, we shall produce the most direct analogies we have been able to discover among the computations of other nations; for they are certainly analogies, whether they be half lunations or not.

The Mexicans are supposed (*Humboldt, Res. i. 295.*) to have derived these periods from "the two states of *watching* and *sleep*, that they considered characterised the revolution of the moon. And the relation observed between the periods of thirteen days, and the half of the time that the moon is visible before and after her opposition, has undoubtedly given to the ritual calendar, the name of *reckoning of the moon*," &c.

The Hindoos, in both particulars, have periods analogous to those related above of the Mexicans; they speak of the *bright* and *dark* sides of the moon, which constitute the day and night of the *pitris*, the bright side being appointed for their labours, and the dark one for sleeping. (*Maurice, Hist. Hind. i. 138.*)

A further analogy to the Mexican custom may be found in the Hindu calendar, (*Asiat. Res. iii. 261.*) in which the months are divided into two periods of *fifteen days* each; by which all their different festivals are regulated, in a manner very similar indeed to those of the Mexicans.

Besides the Hindoos, many other eastern people divide the month into periods of *fifteen days*; such as the Burmas, Chinese, Japanese, Tartars, &c., and I presume the Cantabrians of Spain; for it is said, (*Laborde's View of Spain, ii. 383.*) that they divided the month, into the ascending and descending moon.

Though it is the general opinion, that these numbers *fifteen* and *thirteen*, have their origin in half lunations, it seems to me an incredible supposition, when we consider the perfection of their science in its other parts. A single twelve months experience would demonstrate the error, and if they were so careful in correcting their time, that six hours in

the whole year, were provided for by a special intercalation, it would be very extraordinary indeed, that a grosser error in every month was allowed to pass unheeded. Therefore, I cannot consider the periods of fifteen days, that are in use among various nations of Asia, or the thirteen days period of the Mexicans, to be half lunations, but that they are astronomical periods, artificially compounded in their cyclic systems, to suit the intercalations of those tropical periods.

Thus it seems to me, in every instance, that these small periods of days, have been established from a knowledge of the real length of the year, and to provide for a regular intercalation of the hours, by which solar time exceeds that of the apparent year. Why these nations have selected those particular numbers we know not, but it is evident, that they bear this determinate proportion to the number of the years of their cycles.

The first time in a series of years, that an intercalary day could be used, would be after the lapse of four years, or as expressed in the following table, for a period of 60 years, &c.

Intercalary Days.		Years.	Intercalary Days.		Years.
1	after	4	9	after	36
2	"	8	10	"	40
3	"	12	11	"	44
4	"	16	12	"	48
5	"	20	13	"	52
6	"	24	14	"	56
7	"	28	15	"	60
8	"	32			&c. &c.

Now if any people computed their time by a cycle of vague years, it will be seen by the foregoing table, which may be extended to any length, that an intercalation could be made according to any particular fancy of number, that either science or superstition might deem proper. Of these, the Mexicans have selected No. 13, and made their cycle to consist of 52 years. The Hindus, Chinese, &c., have preferred No. 15, and proportionably thereto, a cycle of 60 years.

That this is the true principle, by which these periods of *thirteen* and *fifteen* days, have been selected, I hold confirmed by the exhibition we are now to make of the Persian intercalary period of 120 years, which moreover offers a stronger analogy in its entire systematic construction, with the Mexican cycle, than the Asiatic cycle of 60 years, which we have already used in our comparison.

The ancient Persian year consisted of twelve months, each of thirty days; and five epagomenes, making a vague year of three hundred and sixty-five days.

Each of the twelve months bore the name of a genius or subaltern deity; and each day of the month, was in like manner designated after thirty genii. Like the Mexican system, these thirty names of days were common to each month of the year; and further in analogy, among the names of the days were the twelve names of the genii, who presided over the months. On the day in each month, that bore the same name with the month, was the principal festival of that month celebrated.

But the Persian year being thus only 365 days, it fell short of real time near *six hours* annually, which were not regarded until 120 vague years had elapsed, and the hours of excess had amounted to *thirty* days. They then intercalated that number of days, in a manner precisely analogous with the Mexican system, before commencing a new cycle.

Thus not only an identity of origin may be seen in these two cyclic computations, but the proportions between the number of the years of the cycle, and the intercalary period, are adjusted on the same principle; so that the one constitutes the first, or smallest period of time, and the other the highest, or the most multiplied term of small periods. And it is also evident, that both systems have been most ingeniously framed, upon an exact knowledge of the length of the tropical year.

To exhibit the close resemblance between the Mexican and Persian systems of computation, we beg leave with a little license, to throw them into a tabular form.

The <i>Old Age</i> of the Mexicans.	years 104	PERSIAN PERIOD.	years 120
its half or period of	52	its half or cycle of	60
the fourth of 52 (<i>tlalpilli</i> .)	13	1-5 of cycle of 60 years,	12
Intercalary days for 52 years,	days 13	Intercalary days for 120	
		years,	days 30
Small periods of <i>thirteen days</i> , or		Periods of <i>thirty days</i> , their	
lowest term of computation.		lowest period of computation.	

The license we have claimed, is in the introduction of the cycle of sixty years, and its divisions, as a part of the Persian computation; and this we have no doubt is both correct and proper, for the systems are evidently the same.

We think, also, that we can perceive the motive that influenced the Persians to use the cycle of 120, rather than that of 60 years; which at first sight, seems to offer all the advantages of its double number; and we offer it as a probable opinion, that the Persians did with this cycle of 120 years, what the Mexicans did with their *Old Age* of 104 years, or double period of 52 years: that is, they intercalated but *twenty-nine* days in 120 years, instead of *thirty*

days, which was the nominal intercalation. In this manner the Mexicans nominally intercalated *twenty-six* days every 104 years; but in reality only *twenty-five*. Unless this was originally the Persian system, I see no use in doubling the cycle of 60 years, which admits the intercalation of half 30, or 15 days, without fractions. But there are other considerations which we shall state confirming this supposition.

We have observed in a former page, that the history of America constitutes an essential part of the history of the material world, as well as of mankind generally; and the mysteries that hang over these subjects, can only be elucidated, by considering them in their most extended relations with the other parts. We have just seen a most pointed resemblance between the astronomical systems of Persia and Mexico, which at first sight, seems to involve the greatest embarrassment in discovering the reasons of the analogy. We apprehend however there is no real difficulty to overcome, and we shall now lay before the reader the solution which we have presumed meets the case exactly.

We have hitherto spoken of the Persian computation of time, as if alone peculiar to that most ancient people; but we do not think that originally this was the fact, but that they had retained in a greater degree than other nations of Asia, an essential part of an astronomical system, which originally was common to all postdiluvian nations; and of which traces are to be observed among all the oriental people, with whom the cycle of sixty years is in use. During the lapse of ages, the confusion of civil and foreign wars, and those multiplied causes of error that are to be found in the history of all ancient kingdoms, we presume the dexterous contrivance, of intercalating 29 days in 120 years, has been lost, and that other Asiatic nations than the Persians, seeing no advantage in the cycle of 120 years, permitted it to be neglected or forgotten. At the same time, they have altered their intercalations from being cyclic, or after long intervals of time, to the one used by ourselves after every four years. But that originally, this period was 120 years among all these Asiatic nations, we deem to be established by the following considerations; which though seemingly a little out of place, we are forced to introduce in the present page, as illustrating, and as being illustrated by, the Mexican astronomical system.

Among the various cycles used by ancient astronomers, is one consisting of 600 years; whose invention Josephus has with every probability, referred to the times preceding the deluge; but which in after times, may be considered as known.

among the Chaldeans, as their cycle called the *NEROS*.^{*} The celebrated astronomer Cassini, was the first who paid any attention to the statement of Josephus; and on an examination of the period, found it a luni-solar cycle, evidently constructed upon a correct knowledge of the revolutions of the sun and moon. "He found, (*Bailly, Hist. Astron.* i. 66,) that 7421 lunar revolutions of $29^d. 12^h. 44' 3''$, amount to 219,146½ days; and that this number of days, make 600 solar years of $365^d. 5^h. 51' 36''$; which differs by less than three minutes from the observations of the present day."

Upon this cycle of 600 years, Bailly (*Histoire de L'Astron.* i. 69,) makes the following reflections: "This period, this exact length of the year of $365^d. 5^h. 51' 36''$, requires intercalations. The year proper, without doubt, consisted of twelve months of thirty days, with five days added to the end of the last month, according to the usages of all the eastern nations. But 600 years of 365 days make but 219,000 days, while the period contains 219,146½. There were therefore 146 days added in some manner or other to the period. The most natural intercalation, is that of a day every four years, as is done in our bissextile years; an intercalation of the greatest antiquity in China, among the Hindus; and we find traces of it likewise in Egypt. But the intercalation of a day every four years during 600 years, will make 150 days; whereas the period only contains 146 such days. There is therefore an appearance, that every 150 years they suppressed an intercalary day, or if we may use the term a bissextile year, as we ourselves do every 100 years. These 150 years may have formed a period, which we may meet with elsewhere."

It appears to me, however, that we are able to shew in what manner, the intercalations for this cycle of 600 years were made, which Bailly was unable to discover; and in a manner decidedly characterising the great perfection of astronomical science in the antediluvian ages; a fact, which that great and learned astronomer has the honour of having first demonstrated to the world, about fifty years ago.

We consider, that the cycle of 600 years, was not divided into four periods of 150 years, as Bailly has conjectured, but

^{*} That the *Neros* was a period of 600 years, is testified by Syncellus, Abydenus, and Alexander Polyhistor. (*Chronologie de Freret*, 14. *Maurice, Anet. Hind.* i. 299.)

Pliny, (*Chron. de Freret*, 29,) says, Hipparchus published tables of the motions of the sun and moon for 600 years; "utriusque sideris cursum in sexcentos annos præcinit Hipparchus." He no doubt stole these calculations from the Chaldeans, whose astronomy he had examined; and, like a Greek, made them known as his own discovery.

into five periods of 120 years; which division of time, the Persians and Chaldeans alone, appear to have retained in their cyclic computations. And one reason for making this peculiar division into fifths, appears to have been, that they might by a dexterous management analogous to the practice, of the Mexicans, intercalate in the cycle of 600 years, 145 days; or 29 days every 120 years, as conjectured page 217.*

That the number 120, had in these very remote times, some intelligible and common use in chronology or astronomy, may be inferred from several circumstances. Thus the Chaldean astrologers said, 120 *sari* had elapsed from the beginning of the world to the deluge of Xisthurus. (*Freret. Chronol.* 14.) We have already discoursed concerning the Persian period of 120 years; and we will further observe that the Bible itself, in the narration of antediluvian history, evidently uses this period of time, when it says, (*Genesis*, vi. 3.) "And the Lord said, my spirit shall not always† strive with man, for that he also is flesh: yet his days shall be *one hundred and twenty years*." The force of this expression, and its happy application to the event, which we suppose occurred at the time this denunciation was made, will be at once perceived, when we observe, that the commencement of every great cycle among the more ancient nations,

* Before we proceed further with this cycle, we think it necessary to shew, that the division of periods of time into fifths, is not an arbitrary conjecture to suit this emergency, but that many analogies directly support it. Thus the cycle of 60 years at present in use among the Hindus, Chinese, &c. is divided into five periods of *twelve years*; which I consider a fraction of the great cycle of 600 years, divided by homogeneous numbers; and bearing no reference whatever to the revolution of the planet Jupiter, to whom the cycle of twelve years is commonly supposed to refer.

We also find that *five calpas*, or periods of *twelve millions of years*, constitute among the Hindus the period of creation; or *sixty millions of years*. By the same system, we observe the people of Thibet, the Greeks, &c., divided their period of creation, into *five ages*. (*Humboldt, Res.* ii 31, 215.) We may also enumerate the *five elements* of the Hindoos, Chinese, Japanese, &c.; perhaps Brahma's *five heads* have some reference to this principle of dividing by fifths, and his loss of one of them, may be solved by a knowledge of these facts.

† Our common translation, in rendering the Hebrew עולם, *always*, is not correct. The word generally means an indefinite, but not an infinite period of time. It is very commonly used to signify a *dispensation*, such as that of the Jews, which was not to last for ever. So with the Greek αἰῶνα, by which it is translated in the Septuagint. Montanus and Tremellius, both render the Hebrew word by *sæculum*, which never means an infinite time. Thompson in his translation of the Bible, expresses it, by "*my breath (or spirit) must not continue in these men to this age*," &c., which I apprehend, conveys the idea of the Bible more correctly. I would translate the Hebrew word in this passage, by *period* or *cycle*; the commencement of which, I presume, the Antediluvians were celebrating, at the time the denunciation of God was made against them.

was attended with the greatest manifestations of joy and mirth; and as is recorded of the ancient Persians, they exultingly said, "this is the new day, of a new month, of a new year, of a new cycle, upon which every thing that depends on time should be renewed." (*Hyde, Hist. Rel. Vet. Pers.* 237.) If we can admit the not improbable supposition, that the antediluvians were celebrating in the manner and expression of the Persians, the commencement of a cycle of 600 or of 120 years, when Noah or some other prophet informed them of the coming destruction, we perceive how apposite the expression becomes; whereas without this explanation, it stands rather embarrassed by the precise, though unintelligible period of time allowed them.*

But to return to the cycle of 600 years: If we are correct in the exhibition we have given of it, both as respects its division into five parts, or cycles of 120 years as retained by the Persians, and also that they intercalated but 29 days to every period of 120 years, it will follow, that the length of the tropical year was perfectly known before the deluge: for 600 vague years, amount to 219,000 days; and the intercalation of 29 days every 120 years, adds 145 more, which will thus make the year 365 days, 5 hours, 48 seconds, or but 48 seconds less than the length of the year according to the latest observation of our own times: an error of but eight hours, for the whole period of 600 years. Of this circumstance they were probably aware, and provided for it in their greater cycles of 6,000, 30,000, or 36,000 years. And we further think, that we can now see for what purpose these immense cycles of years were composed; namely,

*Hyde relates from an Arabic author, (Ibn Mucfa,) the manner the ancient Persians celebrated their *Nauruz*; which though afterwards applied to every *New year's day*, I think belonged originally, to the commencement of the *Neros* cycle only. It presents so curious an analogy to what we have conjectured on the antediluvian celebration, that I shall translate it for the benefit of English readers.

"It was the custom of the Persians on these occasions, that some person of beautiful countenance who was appointed for this purpose, came by night to the palace, where he remained until the next morning; and as soon as the day shone forth, he came into the presence of the king, without asking any permission. When he had thus familiarly introduced himself, the king demanded of him, from whence are you? whither are you going? and what is your name? for what purpose have you come hither? and what do you bring? To which he replied, I am Al-Mansur, (*the august*;) and my name is Al-Mobarek, (*the blessed*;) I have been sent hither from God, bringing the new year." After this followed some ceremonies of bringing in grain of various kinds, eating, &c.; when it was joyfully said, "this is the new day, of the new month, &c."

If we could suppose the prophet of God, who announced the impending deluge, to have come before some great antediluvian monarch, at the time he was expecting Al-Mobarek; it would be admirably in point, and render the divine admonition emphatic in the highest degree.

that they answered the purposes of astronomical tables, upon which all the practical parts of their system of computation were built, and which shewed in an ingenious manner, the extreme nicety to which such calculations might be brought. Thus fractions of time almost insensible, by constantly accumulating, become at last marked periods, which they could provide for by intercalation. It was an after invention, to consider them as being real chronological computations.*

We of course consider the astronomy of the Chaldeans, Persians, Hindus, Mexicans, &c., as systems built upon the principles of antediluvian science; which preserved by the family of Noah, became a common foundation to all future cyclic computations. These principles have been partially modified among these different people, from superstitious ideas, probably arising from conceits of the powers of particular numbers: but which it is evident, bear the same ratio to one another in their combinations, as distinguish those, whose antiquity lead us to suppose them, the original constituents of the astronomical cycles of the antediluvian world.

Before we conclude this chapter on Mexican astronomy, we have one circumstance to consider respecting the religious calendar, which we could not previously discuss.

It will be remembered, that the periods of *thirteen* days, by which this calendar was computed, were formed into cycles of 260 days, as we have observed page 206, and that *seventy-three* cycles of 260 days, constitute the great cycle of 52 years. Our object in thus recapitulating matters already stated, is to call the attention to the apparent use of

* We have some very plausible data to affirm this supposition in the case of the Hindu Yugs, the most notorious instance perhaps of an exaggerated chronology in national history. For Megasthenes (*As Res.* x. 118,) "a man of no ordinary abilities, who had spent the greatest part of his life in India in a public character, and was well acquainted with the chronological systems of the Egyptians Chaldeans, and Jews; made particular inquiries into their history, and declares according to Clemens of Alexandria, that the Hindus and the Jews, were the only people who had a true idea of the creation of the world, and the beginning of things; and we learn from him, that the history of the Hindus did not go back above 5042 years from the invasion of India by Alexander. Manuscripts differ in this date, some stating it 5042, or 6042, others 5402." The true reading should probably be 5178, according to Major Wilford.

Megasthenes lived about 290 B. C. But the Hindu system of the Yugs had been as an astronomical theory, established at least a thousand years before that time: for Sir William Jones informs us, (*Sir Wm. Jones' works*, vii. 80,) that the Vedas which contain the earliest account we have of the Yugas, were composed 1580 years, B. C.

the number *seventy-three*.^{*} Can it be of fortuitous use, or has it a reference to the precession of the equinoxes, which is about 1° in 72 years? The evident use the Hindus have made of this number, induces us to think, that it must have some connexion with that knowledge, though now seemingly unknown to them.[†] But that the cycle of 73 years, is intended to be understood as an entire period among the Mexicans, is most probable, from finding it is not divided into any parts, but embraces the whole cycle of 52 years. Time, industry, and opportunity, may bring all these things to light; and I sincerely trust, we shall realize the observation of Humboldt, that "all we have hitherto learnt respecting the ancient state of the natives of the new continent, is nothing in comparison with the light that will be one day thrown on this subject, if we succeed in bringing together, the materials now scattered over both worlds, that have survived the ages of ignorance and barbarism."

To this account of the Mexican astronomy, we shall add a description of the astronomical religious festival, which they celebrated at the end of every cycle of 52 years; and which is generally termed the secular festival.

We must premise, that the Mexicans believed our world was periodically subjected to certain great physical convulsions, that destroyed the human race with the exception of some two or three individuals, from whom would proceed again another race of mortals like themselves. It was also a part of their belief, that these periodical calamities always happened at the close of one of their cycles of 52 years; and as it was not known, when they might expect the recurrence of these awful calamities, that had four times previously destroyed mankind, they saw every cycle of 52 years draw to its conclusion with apprehension and alarm. It was at this most anxious time, that the ceremonies of the secular festival commenced. On the last night of the cycle, (*Clavig. Hist. Mex.* ii. 92,) they extinguished the fires of all the temples and houses, broke their vessels, earthen pots, and kitchen utensils, preparing themselves in this manner for the ending of the world. The priests, clothed in various dresses and insignia of the gods, accompanied by a vast crowd of people, issued from the temple, and quitting the city directed

* The Mexican year also contained 73 periods of five days, which we have already stated was the small divisions of the months.

† There are frequent allusions to the number 72 or 73, among various ancient nations, either in their chronology or mythology. Thus the Persians said there had been 72 Solymans. (*Bailly, Letter to Voltaire*, ii. 109.) The Greeks also said that Mercury had won in play from the moon the 72d part of each day of the year, for the *accouchement* of Rhea, &c.

their march to a mountain about six miles distant. They regulated their journey so that they might arrive at the mountain a little before *midnight*, upon whose top a fire was to be kindled, in case the time of their destruction had not completed its terrible cycle, which would be determined at that moment of time. While the Mexican people were in this state of fearful suspense, the priests sacrificed a human victim on the top of the mountain, and upon his breast they rubbed two sticks together, until a fire was kindled which they increased to a great size, that all the country around might perceive the guarantee of the world's continuance, at least for another cycle of 52 years.

From this sacred fire, portions were carried to all the houses and temples adjacent, for the renewal of their rites, or domestic uses.

The ensuing thirteen days, were employed in replacing the furniture, dresses, &c., which they had previously destroyed, and in rejoicing at the prospect of longer life. At this time, every thing that could amuse or gratify, was put under requisition. Games, dances, and feats of activity, were every where practised or exhibited. One game, as it is called by the Spanish writers, was exhibited at this time alone; and as a part of the secular festival, we shall describe it under its appellation of game of the flyers. Having procured a tree of suitable size, they erected it in one of the public squares of the city: On its head or top, was adjusted a hollow wooden cap, sufficiently loose to turn around on the head of the mast or tree. To the cap, they attached a square wooden frame, by four ropes of a few feet in length. Through holes in this frame, passed four ropes, which were twisted thirteen times round the head of the tree, and to the loose ends of the ropes, four persons, disguised like eagles, herons, &c. attached themselves. Then springing off simultaneously, the ropes began to untwist from the tree, and the hollow cap to turn round. The great end of this contrivance was, that the persons disguised as eagles, herons, &c. should thirteen times fly round the mast before they reached the ground; and the game thus became emblematical of their cycle of 52 years; as $4 \times 13 = 52$.

It is not improbable, from Dennon's travels in Egypt, (*Atlas, pl. lxxiii.*) that something analogous to this game, was in use among that ancient people, though we have no relation to confirm this conjecture.

It is unnecessary to adduce instances of the manner, in which the ancient nations of the eastern continent, celebrated the returns of their periodical cycles. Such epochs by very

natural associations of ideas, would be attended with great festivals and rejoicings; a feeling which may indeed be measurably appreciated, by our own anniversary festivities on the recurrence of days interesting to us either as individuals, or as members of any political body. We may well suppose, that when religion and astronomy combined to render a day important after the revolution of many years, it would be hailed by great and extensive rejoicings, proportionate to its rare occurrence, or as expressed in the invitation to the secular games of the Romans, men were called to attend a celebration, "that they had never seen before, nor would ever see again."

It is most probable, that the Mexicans had arranged the starry heavens into constellations; the description of which would be of the utmost importance to us, in investigating the origin of that people. But I am afraid, this part of their astronomical system has been irretrievably lost.

Humboldt, (*Res. i.* 180, 207,) however, seemingly mentions manuscripts that describe or enumerate their constellations. From this observation, we can cherish a hope, they may yet be decyphered, and make us acquainted with this part of their antiquities; which will no doubt, throw much light upon their ancient history.

The Mexicans do not appear to have been acquainted with astronomical instruments of any kind, unless Gama's supposition be correct, that they used the linear gnomon. (*Humboldt, Res. ii.* 135.)

On the Religion of the Mexicans, &c.

Of all researches, that most effectually aid us to discover the origin of a nation or people, whose history is either unknown, or deeply involved in the obscurity of ancient times; none perhaps are attended with such important results, as the analysis of their theological dogmas, and their religious practices. To such matters mankind adhere with the greatest tenacity, and which though both modified and corrupted in the revolutions of ages, still preserve features of their original construction, when language, arts, sciences, and political establishments, no longer preserve distinct lineaments of their ancient constitutions.

This assertion none will deny, who have examined the mythologies of the ancient nations of Asia or Africa, or even that one, which classic Greece in a most confused system, has made familiar to all men of liberal education.

Within the period of a half century, the literati of Britain and Hindostan, in an astonishing manner, have removed the veil that concealed the mysteries of ancient paganism, and have exposed to our eyes those physical allegories and historic allusions, that constituted in great part, the original basis of the system. A thousand generations of men have passed away, foreign war and civil commotion have destroyed every ancient kingdom, and yet in despite of all these revolutions of time and empire, and notwithstanding that strong spirit of allegorizing, more fatal to system than the two former combined; yet India still adheres to that paganism, which subverting the purity of the patriarchal worship, raised upon its ruins a monstrous system of perverted history and allegorical physics. By the practices of these living idolaters of Hindostan, we have not only been enabled to identify them with the idolaters of Phœnicia, Egypt, and Chaldea, but from them we have received the key, that opens and develops the system common to all.

As we consider it a matter fully determined, that the mythology of Egypt, Chaldea, Hindostan, &c., have all been based upon a system, which there can be but little doubt, was once common to all postdiluvian nations; we hold, that a most rigid test is thereby furnished, to judge of the antiquity of the demi-civilized nations of America; whose mythological figments and superstitions, can be brought into close comparison with those of the nations of antiquity, and according to the closeness of their analogy, we can with some plausibility, estimate the length of time, they have been separated from each other, and we particularly request the reader curious concerning the origin of the American nations, to bear these circumstances of comparison continually in mind during our present investigation.

Our information concerning the belief of the nations of Anahuac respecting a future state, is but meagre. This being one of those subjects, which the conquerors of Mexico thought unworthy their examination, and consequently, we are only able to give an imperfect account of this part of their theology.

The more civilized nations, considered the souls both of men and beasts to be immortal, as may be distinctly inferred from the ceremonies used at their funerals.

According to Clavigero, (*Hist. Mex.* ii. 3,) the Mexicans distinguished three places, as being allotted for the reception of departed spirits. The souls of soldiers who died in battle, or in captivity among enemies, and those of women who had died in labour, went to the house of the Sun, where they led a life of endless delight. There every day at sun rising,

they hailed that luminary with rejoicings, music and dancing and attended him to his meridian height, where they met with the souls of women, and with similar festivities accompanied the sun to its setting.

After living for four years in this manner, their spirits were supposed to animate clouds, birds of beautiful plumage, and of sweet song, but who always had the power to rise again to heaven whenever they pleased. As their aristocracy prevailed even in heaven, this was the condition of the great and noble. Inferior persons, animated weazles, beetles, and such other animals.

The souls of those that were drowned, or struck with lightning, of those who had died by dropsy, tumors, casualties, and all other diseases, went along with the souls of children who had been sacrificed or drowned in honor of *Tlaloc*, god of water, to a cool and delightful place called *Tlalocan*, where that god resided, and where they enjoyed delicious repasts, and every other kind of pleasure.

The third place for the dead, was called *Mictlan*, or hell, which they considered was a place of utter darkness; in which a god and goddess reigned. They did not suppose that the souls underwent any other punishment there, than what they suffered from the darkness of their abode. Siguenza considered the hell of the Mexicans, to have been situated in the northern parts of the earth. Clavigero thinks they placed it in the centre of the globe.

There is nothing in this system that particularly requires our consideration, except to observe, that transmigration of soul was a doctrine distinctly recognized by them: a superstition that has prevailed among the Egyptians, Hindus, Persians, Celts, &c., and which perhaps, owes its origin to some perverted ideas of man's probationary state in this life, which they have mingled with phenomena of the natural world, sufficiently evident to every moral observer.

The Mexicans, (*Clavig. Hist. Mex. ii. 2.*) had some correct ideas of a supreme, absolute, and independent being; whom they regarded with fear and adoration. They represented him by no external form, because they believed him to be invisible; and spoke of him only by the name *TEOTL*, or God. They applied to him epithets expressive of the greatness and power which they conceived him to possess; such as, *IPALNEMOANI*; *he by whom we live*, and *TLOQUE NAHUAQUE*; *he who has all in himself*. But their knowledge and worship of this supreme being, was obscured and in a manner lost in the multitude of deities invented by their superstition.

They believed in an evil spirit, inimical to mankind, whom they called, TLACATECOLOTL, or *rational owl*; and said, that he often appeared to men, for the purpose of terrifying or doing them some injury.

There seems to be a great deficiency in the Mexican historians, concerning the history of the evil principle, an important part of their religious system, which it is impossible for us to supply.

Among the many deities worshipped by the Mexicans, were thirteen principal gods, in honor of whom they are said to have consecrated that number, but which I trust, we have rather shewn, to have had an astronomical signification and use. We shall endeavour to give a concise, yet accurate description of these deities, from the writings of Clavigero, and other Mexican historians.

TEZATLIPOCA, was the principal deity worshipped in Mexico after the supreme god TEOTL, whom we have already mentioned. His name means *Shining Mirror*, from one that was affixed to his image. He was the god of providence, the soul of the world, the creator of heaven and earth, and master of all things. His image was that of a young man; to denote, that his power was not diminished by the course of time. It was believed, that he regarded the good or evil actions of men, and punished or rewarded them by a special providence. Stone seats were placed at the corners of the streets for him to rest upon when he thought proper, and upon which no Indian was ever permitted to sit. His image, made of *teotl*, (*divine stone*) a black and shining stone, was richly dressed. In his ears, were golden rings; and from the under lip, hung a crystal tube, within which was a green feather, or a turquoise stone. His hair was tied with a golden string, from the end of which hung a representation of the human ear, made of gold, upon which was painted an ascending smoke; by which design they denoted the prayers of the distressed. He had bracelets of gold upon his arms; and in his left hand, a golden fan, adorned with beautiful feathers. This fan was highly polished; and in it, as a mirror, they believed he saw every thing that happened in the world. At other times, to denote his justice, they represented him sitting on a bench covered with red cloth, upon which were drawn the figures of skulls and other bones. A shield with four arrows was borne on the left arm, and the right was lifted up in the attitude of throwing a spear.

OMETEUCTLI and OMECIHUATL, the first was a god, and the last a goddess, whom they believed dwelt in a magnificent

city in the heavens, abounding with delights. There they watched over the world, and gave to mortals their wishes, the former to men and the latter to women. They had a tradition, that the goddess, after having had many children in heaven, at one time brought forth a knife of flint; which her children in a rage threw to the earth; from which sprang 1600 heroes! These, knowing their high origin, and having no servants, (for all mankind had perished by a general calamity) sent an embassy to their mother, to entreat her to grant them power to create men to serve them. The mother answered, that if they had had more exalted sentiments, they would have made themselves worthy to live with her eternally in heaven, but since they chose to abide upon the earth, she told them to go to Mictlanteuctli, god of hell, and ask of him one of the bones of those men who had last perished, which they were to sprinkle with their blood, and from it they would have a man and a woman, who would multiply the species. Xolotl, one of the heroes, went to hell, and got the bone; but from fear that Mictlanteuctli would repent giving it, (which he actually did,) made such precipitate haste, that he fell, and broke the bone into two unequal parts, which accounts for the difference in stature among men.* However, he retained the two pieces, and returned with them to his brothers, who put them in a vessel, and sprinkled them with blood, drawn from different parts of their bodies. On the fourth day, they beheld a boy; and continuing to sprinkle with blood for three days more, a girl was made. These were both consigned to the care of Xolotl, to be brought up, who fed them with the milk of thistles. From this ceremony, they say, originated the practice of drawing blood from the different parts of the body; an act of devotion which constituted an essential part of the Mexican ritual.

These divinities appear to have presided in an especial manner over all new born children. (*Clavig. Hist. Mex.* ii. 95, 96.)

CIHUACOHUATL, (*woman serpent*), called also QUILAZTLI, or TONACACIHUA, (*woman of our flesh*), was considered by the Mexicans as the mother of the human race. (*Clavig. Hist. Mex.* ii. 8. *Humboldt, Res.* i. 195.) She is reported to have always borne twins. As we cannot pretend to give any original information concerning this goddess, we beg leave to introduce the following extract from Humboldt as above quoted. "The Mexicans considered her as the mother of the human race; and after the god of the celestial

* So translated, but I rather think it should be, *for the difference of stature between men and women.*

paradise, *Ometeuctli*, she held the first rank among the divinities of Anahuac; we see her always represented with a great serpent, which some of their paintings exhibit to us as a feather-headed snake cut in pieces by the great spirit Tezcatlipoca, or by the god Tonatiuh, a personification of the sun. These allegories remind us of the ancient traditions of Asia. In the *woman and serpent* of the Mexicans, we think we perceive the Eve of the Semetic nations; in the snake cut in pieces, the famous serpent *Kaliya* or *Kalinaga* conquered by Vishnu, when he took the form of Crishna. The Tonatiuh of the Mexicans, appears also to be identical with the Crishna of the Hindoos, recorded in the Bhagavata Purana, and with the Mithras of the Persians. The most ancient traditions of nations, go back to a state of things when the earth covered with bogs, was inhabited by snakes, and other animals of gigantic bulk. The beneficent luminary, by drying up the soil, delivered the earth from these aquatic monsters."

In describing a Mexican painting, Humboldt also observes in another page, (*Res.* i. 195.) "Behind the serpent who appears to be speaking to the goddess Cihuacohuatl, are two naked figures; they are of a different colour, and seem to be in the attitude of contending with each other. We might be led to suppose, that the two vases which we see at the bottom of the picture, one of which is overturned, is the cause of this contention. The *serpent woman* was considered at Mexico, as the mother of two twin children, and these naked figures are perhaps her children; they remind us of the Cain and Abel of Hebrew tradition."

As I cannot conceive of any time when serpents were so multiplied upon the earth, as to make a deliverance from them an epoch in mythological history, it is not easy to believe that the Mexicans understood any such physical allusion as is hinted by Humboldt. I believe the connexion is with that moral serpent, whose history we so well know belongs to that of our first parents.*

The goddess Cihuacohuatl, had a male companion called TONACATEUCTLI, *lord of our flesh*, but of whom we have no particulars to relate.

TONATRICLI and MEZTLI, were the names of the sun and moon, both deified by the Mexicans, and other nations of Anahuac. They said, that after the regeneration and multiplication of the human race, by the 1600 heroes, there was

* The first woman, is by the Chinese also denominated SHAY NEU, or *serpent woman*. (*Morrison's Chinese Dict.* i. 60.) No reason for this appellation is assigned by the editor.

no sun; for the one that formerly existed, was destroyed by the calamity we have just noticed, in which mankind perished. The heroes, therefore, assembled in Teotihuacan, around a great fire; and said to the men, that the first of them who would throw himself into the flames would have the glory to be transformed into a sun. One of the men, called Nanahuatzin, more intrepid than the rest, threw himself into the flames, and descended to hell. During the time of his absence the heroes were betting, as to what moment, and in what part of the heavens, the sun would first appear: these bets, as soon as lost, were sacrificed; and consisted of quails, locusts, &c.

At length the sun rose in that quarter, which, from that time, has been called the *Levant*, (*or place of Rising—the East.*) But he had scarcely risen above the horizon, before he stopped; which the heroes perceiving, sent to him to desire he would continue his course. The sun replied, he would not until he should see them all put to death. The heroes were no less enraged than terrified by that answer; and one of them taking his bow and three arrows, shot one at the sun; but the sun saved himself by stooping. After several arrows had been discharged without effect, the sun enraged, turned back one of those shot at him, and fixed it in the forehead of that hero who had first drawn his bow against him, and who instantly expired.

The rest, intimidated by the fate of their brother, and unable to cope with the sun, resolved to die by the hands of Xolotl; who, after killing his brothers, put an end to his own life. The heroes, before they died, left their clothes to their servants: and since the conquest by the Spaniards, certain ancient garments have been found, which were preserved by the Mexicans with extraordinary veneration, under a belief that they had them from those ancient heroes.*

They told a similar fable of the origin of the moon. Another person at the same assemblage, following the example of Nanahuatzin, threw himself into the fire; but the flames being somewhat less fierce, he turned out less bright, and was transformed into the moon.

To these two deities they consecrated the two celebrated temples of the plain of Teotihuacan, which we shall describe hereafter, but which it is supposed were erected by nations anterior to the Mexicans.

* The Japanese according to Kæmpher, (*Hist. Japan*, i. 207,) still preserve in some of their temples, swords, arms, and other warlike instruments, which they consider to have belonged to a semi-divine race, that possessed their islands before the present race of men.

QUETZALCOATL, (*feathered serpent*), was among the Mexicans, and all other nations of Anahuac, the god of the air. He was said once to have been high priest of *Tula*.^{*} They figured him tall, big, of a fair complexion, open forehead, large eyes, long black hair, and a thick beard. From a love of decency, he wore always a long robe, which is represented to have been spotted all over with red crosses, (*Herrera*, ii. 317.) He was so rich that he had palaces of gold, silver, and precious stones. He was thought to possess the greatest industry, and to have invented the art of melting metals and cutting gems. He was supposed to have had the most profound wisdom; which he displayed in the laws he left to mankind, and above all, the most rigid and exemplary manners. Whenever he intended promulgating a law to his kingdom, he ordered a crier to the top of the mountain *Tzatzitepec*, (hill of shouting,) near the city of Tula, from whence his voice was heard for three hundred miles. In his time the corn grew so strong, that a single ear was a load for a man; gourds were as long as a man's body; it was unnecessary to dye cotton, for it grew naturally of all colours; all their fruits were in the same abundance, and of an extraordinary size; then also, there was an incredible number of beautiful and sweet singing birds. In a word, the Mexicans imagined as much happiness under the priesthood of Quetzalcoatl, as the Greeks did under the reign of Saturn, whom this Mexican god also resembled by the exile he suffered. Amidst all this prosperity, Tezcatlipoca, their supreme but *visible* god, (we know not for what reason,) wishing to drive him from that country, appeared to him in the form of an old man, and told him it was the will of the gods that he should be taken to the kingdom of Tlapalla. At the same time he offered him a beverage, which was readily accepted, in hopes of obtaining that immortality after which he aspired: he no sooner drank it, than he felt himself so strongly inclined to go to Tlapalla, that he set out immediately, accompanied by many of his subjects. Near the city of Quauhtitlan, he felled a tree, with stones, which remained fixed in the trunk; and near Tlalnepantla, he laid his hand upon a stone, and left an impression, which the Mexicans showed to the Spaniards.[†] Upon his arrival at Cholula, the citizens detained him, and made him take the government of their city. He showed

^{*} Tula, was the country of the Toltecks before they emigrated to Anahuac; we presume therefore, that the Mexicans derived their knowledge of this deity from that ancient people.

[†] This reminds us of the impressions of the feet of Budha, Hercules, and others in various parts of Asia; and of those observed in various parts of North America. See page 110.

much aversion to cruelty, and could not bear the mention of war. To him, the Cholulans say, they owe their knowledge of melting metals, the laws by which they were afterwards governed, the rites and ceremonies of their religion, and as some say, the arrangement of their seasons and calendar. After being twenty years in Cholula, he resolved to pursue his journey to his imaginary kingdom of Tlapalla; carrying along with him four noble and virtuous youths: but on arriving at the maritime province of Coatzacoalco, he dismissed them, and desired them to assure the Cholulans, that he would return to comfort and direct them. Some said that he suddenly disappeared, others that he died on the sea shore. But however that may be, Quetzalcoatl was consecrated as a god by the Toltecas of Cholula, and made chief guardian of their city, in the centre of which, in honour of him, they raised a great eminence on which was built a temple. Another eminence surmounted by a temple, was afterwards erected to him in Tula. From Cholula, his worship was spread over the country, where he was adored as the god of the air. He had temples in Mexico and elsewhere; and some nations even enemies of the Cholulans, had temples and priests dedicated to his worship in the city of Cholula, whither persons came from all parts of the land to pay their devotions, and fulfil their vows.

His festivals were great and extraordinary, especially in Cholula. In the divine years,* they were preceded by a rigid fast of eighty days, and by dreadful austerities practised by the priests consecrated to his worship. The Mexicans said that Quetzalcoatl cleared the way for the god of water; because in these countries, rain is generally preceded by wind. (*Clavig. Hist. Mex.* ii. 11.)

Acosta says the idolatrous image of this god, bore "a scythe in his hand," (*Nat. and Mor. Hist. lib. 5, chap. 9,*) which is also remarked by Humboldt (*Res.* ii. 22,) in his observations on the five ages of the Mexicans. See also his plate of these Mexican cosmogonical fictions.

The preceding description, which we have extracted from Clavigero, is confirmed in its details by Humboldt; both of whom direct our attention to incidents in the history of Quetzalcoatl, analogous to those of Saturn. But Saturn is indubitably a personification of the patriarch Noah, as may be seen in the writings of Bochart, Bryant, Faber, &c. In like manner, the history of Quetzalcoatl, evidently refers to particulars that characterize the legendary history of the great

* Divine years, were every fourth year, and were those that bore the sign of the rabbit, see page 206.

postdiluvian father among all the ancient nations of the eastern continent. This will be made more apparent by the ensuing statements, which seem to have been overlooked by Clavigero, Humboldt, and others, owing to some confusion of the early Spanish writers on Mexican antiquities.

Humboldt (*Researches*, i. 95,) says, that a very remarkable tradition still exists among the Indians of Cholula, that the great pyramidal temple of that town, which we have described as being erected to the worship of Quetzalcoatl, was not destined originally for that service. This tradition, which has been recorded by a Dominican monk, who visited Cholula A. D. 1566, is thus related from his work by Humboldt. "Before the great inundation, which took place four thousand eight hundred years after the creation of the world, the country of Anahuac was inhabited by giants; all of whom either perished in the inundation, or were transformed into fishes, save seven, who fled into caverns. When the waters subsided, one of the giants called Xelhua, surnamed the architect, went to Cholula, where as a memorial of the mountain Tlaloc, which had served for an asylum to himself and his six brethren, he built an artificial hill in form of a pyramid. He ordered bricks to be made in the province of Tlamanalco, at the foot of the Sierra of Cocotl; and to convey them to Cholula, he placed a file of men who passed them from hand to hand. The gods beheld with wrath this edifice, the top of which was to reach the clouds. Irritated at the daring attempt of Xelhua, they hurled fire on the pyramid. Numbers of the workmen perished; the work was discontinued, and the monument was afterwards dedicated to Quetzalcoatl the god of the air." From this tradition, which applies the history of the catastrophe at Babel, to the pyramidal temple of Cholula, we learn, that though the more general tradition of the Cholulans, was, that their temple had been erected to Quetzalcoatl, (*Clavigero, Hist. Mex.* ii. 12, 13, 37; *Acosta, Nat. and Mor. Hist. lib. 5 chap. 9*;) yet another tradition, according to Rios and Humboldt, stated, that it was not originally intended for the worship of that divinity. I think, however, there is but a nominal discrepancy between the two relations. What the Cholulans told Rios and Humboldt, means nothing more, than that the temple was built to commemorate the escape of certain individuals from the deluge, and was not originally dedicated to the *god of the air*, which though an attribute of Quetzalcoatl, is very evidently a minor if not insignificant feature in his character, compared to those which constitute his resemblance to the patriarch Noah.

Thus I apprehend, the two traditions may not only be

made consistent with each other in their prominent features, but that the one supplies matter, more abundantly confirming our general apprehension, of this deity having been a mythological personification of the great diluvian patriarch.

We may also state in further confirmation of these views, that it was the most ancient practice of the ancient pagans of Asia, to erect similar montiform temples, which it can now be scarcely doubted, were commemorative of mount Ararat, and the regeneration of the human race. But of this subject we shall take more detailed views, when we treat of the Mexican temples.

We have not yet done, however, with the resemblances that connect Quetzalcoatl with the history of Noah; for we shall find a pretty clear evidence of their identity, in a part of his Mexican worship, which seems not obscurely to represent those rites commemorative of the events of the deluge, which have been also observed among all the more celebrated nations of antiquity.

The following narration is to be found in Acosta. (*Nat. and Mor. Hist. lib. 5th chap. 30.*) "There was at this temple of Quetzalcoatl at Cholula, a court of reasonable greatness, in the which they made great dances and pastimes, with games and comedies, on the festival days of this idol; for which purpose there was in the midst of this court, a theatre of thirty foot square, very finely decked and trimmed, the which they decked with flowers that day, with all the art and invention that might be; being environed round with arches of divers flowers and feathers, and in some places, *there were tied many small birds, conies, and other tame beasts.* After dinner, all the people assembled in this place, and the players presented themselves, and played comedies; some counterfeited the deaf and rheumatic, others the lame, some the blind and crippled, which came to seek for cure from the idol. The deaf answered confusedly, the rheumatic coughed, the lame halted, telling their miseries and griefs; wherewith they made the people to laugh; others came forth *in the form of little beasts, some attired like snails, others like toads, and some like lizards;* then meeting together, they told their offices, and every one retiring to his place they sounded on small flutes which was pleasant to hear. They likewise counterfeited *butterflies, and small birds of divers colours,* which were represented by the children who were sent to the temple for education: then they went into a little forest, planted there for the purpose, where the priests of the temple drew them forth with instruments of music. In the mean time,

they used many pleasant speeches, some in propounding, others in defending, wherewith the assistants were pleasantly entertained. This done, they made a mask or mumery with all these personages, and so the feast ended."

It is impossible not to discern in this ceremony, a commemoration of the ark; in which, men, beasts, birds, and reptiles, were collected together, under the auspices of Quetzalcoatl; whom we have attempted to prove was a personification of Noah.* We also see another feature of the old arkite rites, in their going out of the temple representing the cavity of the ark, with music and other marks of rejoicing, into a wood planted for the purpose; and which no doubt in these mysteries, represented the resettlement of the earth. Though we do not pretend to say, that these ancient events of the history of mankind, were not materially confused, and these scenic representations misunderstood among the people of Anahuac, still we cannot help suggesting, that the unfortunate analogy which the Spaniards perceived in these mysteries, to their own dramatic performances, has made them overlook the religious object of the celebration, and occasioned the neglect of other parts of these arkite rites, that would have even characterized them beyond all dispute. To any one, however, conversant with the mythological systems of Egypt, Persia, or Hindostan, the intention is abundantly evident. But as it would be foreign to our disquisitions, to enter upon such details, we must only refer to writers upon this subject;† and proceed to describe other deities of the land of Anahuac.

It may not be amiss to add, that there is no improbability in supposing some high priest of the god Quetzalcoatl, and who indeed had the practice of assuming his name, (*Clavig. ii. 49,*) may have had from lapse of time, some events of his history blended with the traditional history of the god. All that we contend for, is the origin of his mythological history, and not to explain it in every particular of narration.

TLALOC or TLALOCATEUCTLI, (*Master of Paradise,*) was the god of water. The Mexicans and others, called him, fertiliser of the earth and protector of their temporal goods. They believed he resided upon the highest mountains, where the clouds are generally formed. His image was painted blue and green, to express the different colours

* It will be remarked on recurring to our history of this divinity at page 232, that he is said to have been a *deified man*, a peculiarity in the Mexican theogony sufficiently remarkable.

† Bryant, *Analysis of Anc. Mythology*, Faber, *Origin of Pagan Idolatry*, are the two works most deserving examination.

observed in water; and he held in his hand a rod of gold, of an undulated and pointed form to denote lightning.

Tlaloc, was one of the divinities worshipped by the Toltecas, and it is said, that an image of him was destroyed by the Spaniards, which had been seated on Mount Tlaloc by that ancient people.

He had a female companion, who was worshipped under the name of *Chalchiuhcueje*, as the goddess of water. She was also known by various other names, derived from the appearance or effects of water, which we do not think necessary to enumerate.

XIUTEUCTLI, (*master of the year and of the grass*), was among these nations the god of fire. He was greatly revered in the Mexican empire: at their dinners they made an offering to him of the first morsel of their food, and the first draught of their drink, by throwing them both into the fire.

At the festival held in honour of this god in the last month of the Mexican year, the fires of the temples and private houses were extinguished, and again lighted from one kindled before this idol.

It has been a very general custom with pagan nations, to perform a similar annual festival; at which time their priests collected a tribute for the new fire. The Persians, the Celts, and the Sclavonian nations, all followed the practice, which to a certain degree has been continued to our time. (*Coll. Reb. Hib.* iv. 346. *Tooke's Hist. Russia*, i. 92.)

The Peruvians, also had an analogous practice, as will be observed in our account of that people.

CENTEOTL, (*goddess of the earth and corn*), called likewise TZINTEOTL, (*original goddess*), TONACAJOHUA, (*she who supports us*), and various other names, was particularly revered and honoured by the Totonacas, who esteemed her to be their chief protectress, and erected upon the top of a high mountain, a temple where she was served by a great number of priests, solely devoted to her worship. They held this goddess in great veneration, as they imagined she did not require human victims to be sacrificed to her, but was contented with doves, quails, &c. They expected she would ultimately deliver them from the cruel slavery they endured from the other gods, who required the sacrifice of so many human victims. At her temple among the Totonacas, was one of the most renowned oracles of the country.

Baron Humboldt (*Res.* i. 221.) says, that Centeotl is the same with the Lakshmi of the Hindoos; but I can perceive no particular analogies that justify the comparison.

MICTLANTEUCTLI, *the god of hell*, and MICTLANTIHUATL, his female companion, were supposed by the Mexicans to dwell in a place of great darkness, in the bowels of the earth. Sacrifices and offerings were made to them by night, and the chief minister of their worship, was always dressed in black to perform the functions of his priesthood.

HUITZILIPOCTLI OR MEXITLI, was the god of war, the deity most honoured by the Mexicans, and was considered their chief protector. His origin is thus described: There lived in Coatepec, a place near the ancient city of Tula, a woman called Coatlicue, who was extremely devoted to the service of the gods. One day, according to her custom as she was walking in the temple, she beheld descending in the air, a ball made of various feathers. She seized it and placed it in her bosom, intending afterwards to decorate the altar with the feathers; but on searching for them after her walk, to her great surprise it was not to be found, and her wonder was much increased when she perceived from that moment she was pregnant. Her pregnancy was discovered by her children, who, though they did not suspect their mother's virtue, yet fearing the disgrace she would suffer in the opinion of the world, they determined to put her to death. She was in very great affliction at the thoughts of dying by the hands of her own children, when she heard a voice issue from her womb, saying, "be not afraid mother, I shall save you with the greatest honour to yourself and glory to me." Her hard-hearted sons, guided and encouraged by a sister, who had been most keenly bent upon the deed, were upon the point of executing their purpose, when Huitzilopochtli was born, with a shield in his left hand, a spear in his right, and a crest of green feathers on his head, the left leg adorned with feathers,* and his face, arms, and thighs, streaked with blue lines. As soon as he came into the world, he displayed a twisted club, and commanded one of his soldierst to kill his sister, as the one most guilty. He himself attacked the others with so much fury, that in spite of their efforts, arms, or intreaties, he killed them all, plundered their houses, and presented the spoils to his mother. Men were so terrified that they called him Tetza-huitl, *terror*, and Tetzauchteotl, *terrible god*. This was the god, who, becoming the protector of the Mexicans, conducted them through their pilgrimage, and at length settled them on the place where Mexico was afterwards built. His

* From this circumstance it is said, he derived his name. *Huitzilin* signifies the humming bird, and *opochtli*, "the left," i. e. his left leg was adorned with feathers of the humming bird.

† We are not informed from whence these soldiers were derived.

statue was of a gigantic size, in the posture of a man sitting on a bench of a blue colour, from the corners of which issued four large snakes: his forehead was blue, and his face covered with a golden mask, as was also the back of his head by another: upon his head was placed a crest, shaped like the beak of a bird: around his neck a collar, consisting of ten figures of the human heart: in his right hand was a large blue twisted club; in his left a shield, on which five balls of feathers were arranged in the form of a cross; from the upper part of the shield rose a golden flag, with four arrows, which the Mexicans believed came from Heaven: his body was girt with a large golden snake, and adorned with many small figures of various animals, made of gold and precious stones. Each of these figures, Clavigero says, had a particular meaning, but which he does not relate. To this deity were sacrificed more human victims than to any other god of Mexico.

Huitzilopochtli had for a companion a younger brother, of whose generation no account is given. He was also a god of war, and was called TLACAHUEPANCUEXCOTZIN. He also had a lieutenant, named PAINALTON, *swift or hurried*.

Huitzilopochtli had a wife named *Teoyamiqui*, who conducted the souls of warriors, who died in defence of their gods, to the house of the Sun, or the elysium of the Mexicans.

In the descriptions that have been given us of Huitzilopochtli, there does not seem to be, at first sight, any particulars that appear to merit comparison with the history of any pagan divinity of the ancient world. His miraculous conception and birth is partially analogous to that of Fo-hi, a deity of the Chinese, whose mother was impregnated by a rainbow;* but there does not appear any other features of resemblance between the two. His attributes as god of war, are such as might be naturally ascribed to any warlike deity.

But in a peculiar religious ceremony, that was celebrated to his honour by the Mexicans, it seems to me, that certain views are implied, that connect his history with some very ancient superstitions of the eastern continent, whose signification has never yet been explained. But as they are seemingly of the highest antiquity, and very widely adopted among the superstitions of different pagan nations, it is impossible but that they imply some mysterious signification. Acosta says, (*Nat. and Mor. Hist. lib. 5. chap. 24. Clavig. Hist. Mex. ii. 86.*) that two days before the principal

* Nana, the mother of the Phrygian god Attis, is also said to have been rendered pregnant of him, by putting in her bosom a pomegranate, which she had accidentally found. (*Bryant, Anal. Ant. Mythol. ii. 380.*)

festival of Huitzilopochtli, the sacred virgins, with grains of roasted maize, and seeds of beets, mixed together with honey, or the blood of children, made an idol of Huitzilopochtli, which they clothed with rich garments, and seated on a litter. On the morning of his festival, they carried this idol in procession around the city of Mexico, and then to the temple, where they had prepared a great quantity of the same paste or composition of seeds and blood, of which they had made the idol, and which they called the flesh and bones of Huitzilopochtli. After a certain consecration, the idol was sacrificed after the manner they sacrificed men; and his body was broken into small pieces, which together with those portions called his flesh and bones, were distributed among the people; who in the words of Acosta, "both men, women, and little children, received with such tears, fear, and reverence, as it was an admirable thing; saying they did eat the flesh and bones of God, wherewith they were grieved. Such as had any sick folks, demanded thereof for them, and carried it with great reverence and devotion."

That this extraordinary ceremony was of ancient Mexican use, and no invention of the Spanish priests, is evident from the account given of it by Acosta; who calls it, "a communion, which the devil himself, the prince of pride, ordained in Mexico to counterfeit the holy sacrament."

The same origin has been ascribed by Justin Martyr, (*Apol. Cap. xvi.*) to a practice I consider analogous, though not so plainly described in the Mithraic mysteries. "Quod pravi dæmones imitati, etiam in Mithræ mysteriis fieri docuerunt. Scitis enim aut scire certe potestis in ejus qui initiatur sacris, *panem et aquæ poculum*, cum certis quibusdam verbis proponi."

Tertullian (*De Præscrip. Hæret.* 247,) also ascribes to the devil, the resemblance that he imagined between the mysteries of Mithra and Christianity; whom he moreover charges with imitating baptism, marking the foreheads of the initiated, and among other things, "*celebrat et panis oblationem et imaginem resurrectionis inducit*," &c.

But the practice was much more widely extended than these fathers imagined; for the old Sabeans (*Stanley's Hist. Philosophy*, 799,) in their fifth month, "killed a new born infant to the honour of their gods, which they beat to pieces; then they take the flesh, and mix it with rye meal, saffron, ears of corn, mace, and little cakes like figs; they bake this composition in a new oven, and give it to the people of the congregation of Sammael all the year long." (I suppose according to their requirement.) "No woman or servant eats of it."

The people of Nicaragua, (*Herrera*, iii. 301,) likewise used a consecrated bread, made of grains of maize and blood, drawn from their bodies; which they eat on certain religious occasions. Of this circumstance we shall again speak, in our chapter on Guatemala.

The Peruvians, also, (*Garcil, Roy Com.* 258,) had a practice of similar import with the superstition of the Sa-beans, which we shall notice when treating of that people.

The Druids, at certain seasons of the year, according to Du Paw, (*Recherches sur les Americ.* ii. 298,) consecrated bread and water, which after many ceremonies, "*augustes et ennuyeuse*," they distributed to the people.

There is nothing in the history of Huitzilopochtli, that throws a direct light on this mysterious superstition; but I think we may not implausibly conjecture, that it was originally connected with those mythological stories, that represent Osiris, Bacchus, Adonis or Thamuz, &c., to have been cut or torn to pieces, and their members scattered over the world; and it was, I presume, in commemoration of this event, that cakes of bread were used in the mysteries of antiquity; which were either moulded into the form of parts of the human body, or else were stamped with such figures.

That something of this kind was practised, we learn from Clemens Alexandrinus, (*Faber. Pag Idol.* iii. 130,) who tells us, that the ark borne in the Eleusinian mysteries, contained "cakes moulded into the shape of navels, pomegranates, and the indecorous hieroglyphic of the female principle." As Clement's works are out of my reach, I cannot say how much closer the analogies may be to the Mexican superstition.

As I consider the ceremonies that belong to all the ancient mysteries of Egypt, Phœnicia, Persia, &c., to have been originally the very same in purport; we may from the imperfect descriptions of them that have reached our time, comprehend partially their general intention; but as any description of them, would make a very considerable digression from the proper subject of our essay, we must refer our readers to the works of Bryant, and especially to the writings of Faber on Pagan Idolatry. These writers have shewn almost to absolute demonstration, that the ancient mysteries, were commemorative of diluvian history and the regeneration of mankind; which they perhaps not only considered physically, but also in a moral or spiritual sense. With these mysterious exhibitions, they also connected their physical allegories, their doctrines of transmigrations, and no doubt, certain corrupted traditions of the patriarchal wor-

ship. Among this last, I consider the idea of the dilaceration of Orpheus, Bacchus, Osiris, &c.; which, as far as I can perceive, offers no analogy to the history of the great diluvian patriarch, unless it be of a typical prospective nature, which it will very well bear, and thus connect the transmigration of the first man with Noah; and finally with him, who was expected to be the great deliverer of man, and the restorer of the golden age. Such traditions are not equivocally expressed in the writings of both the eastern and western mythologists, and are alluded to as all general readers know by Virgil in his fourth Eclogue. On this subject, however, we shall speak more at large in the concluding pages of this essay.

Besides these more important deities, others were worshipped by the Mexicans, whose history as far as we can perceive, do not merit any notice further than a bare enumeration; such were

JOALTEUCTLI (*god of the night,*) probably a synonyme of Meztli, or the moon.

JOALTICITL (*nightly physician or guardian,*) goddess of cradles.

JACATEUCTLI (*god of commerce.*)

MIXCOATL (*goddess of hunting.*)

OPOCHTLI (*god of fishing.*)

HUIXTOCIHUATL (*goddess of salt.*)

TZAPOTLATENAN (*goddess of physic.*)

IXTLILTON (*god of physic.*)

COATLICUE (*goddess of flowers.*)

TEXOATZONCATL (*god of drunkards.*)

TLAZOLTEOTL OF IXCUINHA (*the goddess of pleasure and licentiousness.*)*

XIPE (*god of the goldsmiths.*)

NAPPATEUCTLI (*god of the mat weavers.*)

OMACATL (*god of mirth.*)

TETEOINAN (*a deification of a daughter of a king of Colhuacan.*)

ILMATEUCTLI (*goddess of old age.*)

Besides these more considerable gods, there were two hundred and sixty deities, to whom that number of days, constituting a particular cycle were consecrated.

I do not know whether it was these deities, whom the Mexicans worshipped in their houses, as their penates or lares; of which fact Clavigero takes notice, when he relates, the kings and princes have six little idols always in their houses, the nobility four, and the common people two. (*Hist. Mex.* ii. 25.)

* Humboldt calls her the "voluptuous goddess;" but we have no account whether she was worshipped with obscene rites. It is a curious fact, however, that the planet Venus is called after the first name of this goddess. (*Humboldt, Res.* ii. 174.)

It seems evident from the accounts given by Humboldt, that certain animals were also worshipped by the ancient Mexicans. As I have no authorities of my own on this point, I beg leave to introduce the following extract from his *Researches*, ii. 48.

"In the month of January, 1791, a tomb two metres long, and one broad, was discovered, filled with fine sand, and containing a well preserved skeleton of a carnivorous quadruped, which appeared to be the *coyote* or Mexican wolf. Clay vases, and small well cast brass bells, were placed near the bones. This tomb was no doubt that of some sacred animal; for the writers of the sixteenth century, inform us, that the Mexicans erected small chapels to the wolf, tiger, eagle, and snake; and what is more, the priests of the *sacred wolf* formed a particular congregation or convent."

The other nations of Anahuac, generally worshipped the same deities as those revered by the Mexicans, but sometimes under a different name, and with some variety in their ritual ceremonies. The god chiefly worshipped by the Mexicans, was *Huitzilopochtli*; by the Cholulans, *Quetzalcoatl*; by the Totonacs, *Centeotl*; and by the Ottomies, *Mixcoatl*. The Tlascalans, who emigrated to Anahuac together with the Mexicans, worshipped *Huitzilopochtli*, under the name of *Camaxtle*. We have no signification given us of this appellation, and it may be an epithet applied to this god, strictly Mexican in its etymology. But I cannot help thinking from this circumstance, as well as from various other considerations, that the religious systems of Anahuac when invaded by the Spaniards, were not of one similar purpose and design; but that they were compounded out of various theological superstitions that had prevailed in that country from immemorial time: and that those nations who last emigrated to the country, mingled their traditional religion with those they found there before them, and hence confusion of character exists among them, and departures from their ancient mythological peculiarities.

I think this may be inferred, from the variety of deities that these nations chose as their protectors and guardians. The Mexicans, who were a warlike tribe, in worshipping *Huitzilopochtli* as their chief divinity, may have in this manner appropriated to his worship, certain rites that had belonged to a deity peaceful and benignant. The Cholulans, among whom we consider the Toltecan rites were more especially preserved, worshipped *Quetzalcoatl*; who we cannot but consider as the more ancient deity of the land, as his character assimilates itself to that of Saturn, Osiris, and

the most ancient divinities of the eastern continent. The Totonacas, in worshipping Centeotl the goddess of grain and agriculture, shew certainly a scheme very different from that of the Mexicans, and which it is not easy to imagine could have ever belonged to the same religious system, without admitting that a very great departure from original principles had taken place. This we may more readily believe, would happen with those who made the deity of war their chief god, than that others but of equal demi-civilization, had ceased to worship the god of battles, and directed their blameless adoration to an agricultural divinity. Under any circumstance of change, however, confusion of character and worship would take place, and that spirit of engrossing whatever seemed decorous or majestic in the worship of any other divinity, to the service of the tutelary deity, would sooner or later induce the greatest departures from their original types, and attributes almost inconsistent with their natures, would be ascribed to these divinities. I must however leave the examination of this subject to others, which is both interesting and important, and well deserving of special inquiry.

The Mexican divinities were represented by very numerous idolatrous images. They were generally made from clay, sometimes of stone or wood, and more rarely of gold, silver, or precious stones. They also, anterior to the Spanish conquest, paid an idolatrous homage to the figure of the *cross*: but as we have no information on this practice beyond the mere fact, we shall postpone our comments until we treat of the people of Guatemala.

It is not known in what manner the ancient Toltecas worshipped their deities, most probably, however, their rites were bloodless. It seems to be the prevailing opinion, that the cruel sacrifices of men, so common in Anahuac at the time of the conquest, arose from the oppression of the Mexicans, who had subdued the land and established their ferocious and sanguinary religion, wherever they introduced their colonies or garrisons.

They sacrificed men in great numbers, chiefly by cutting open the breast of the living victim and tearing out the heart, which while quivering with life, they offered to their idols.*

* It has been conjectured, that human sacrifices were not used by the Mexicans, until after their settlement in Anahuac. To this opinion Humboldt seems to incline, though he admits the possibility of their having been anciently practised among them in their northern abode. I am of opinion the latter supposition is correct; for we find it related by Acosta, book 7, chap. 5th, that when the Mexicans first arrived in Anahuac, a number of persons were found dead on the morning after a dispute had taken place among them, "whose breasts had been cut open, and their hearts torn out," no doubt a contrivance of the priests, who represented their deaths as an instance of divine displeasure.

They drowned the victims offered to Tlaloc; and to Xiuh-teuctli, god of fire, they sacrificed men, by first throwing them alive into a large fire, whence they soon drew them out and cut open their breasts, as already stated. On other occasions, they shut the victims up in cells or caverns, and starved them to death.

As the Mexicans were a very superstitious people, their calendar abounded with fasts, festivals, rejoicings, and bloody penances; but which we cannot undertake to describe, as our disquisitions are not directed to such an analysis, unless when apparently involving matters of some importance in detecting the origin of these people. We therefore must refer the reader curious in these particulars, to the works of Acosta, Clavigero, Humboldt, &c. But that our sketch of their religion may not be altogether deficient on these subjects, we subjoin the following description of their manner of sacrificing men.

The usual number of priests required at such times, were six; one of whom acted as sacrificer, and the others as his assistants. They carried the victim dressed in the insignia of the god to whom he was to be sacrificed,* around the city, and afterwards took him naked to the upper area of the temple, when having pointed out to the bystanders the idol to whom the sacrifice was to be made, they extended the victim on his back over a large convex stone, placed there for this purpose, to which he was firmly held down by the assistants. Then the chief priest, with a sharp flint cut open his breast, and tore out with his hand the heart, which whilst palpitating, he offered to the sun and then threw it at the feet of the idol. It was then taken up and presented to the image, and afterwards burned and the ashes preserved with great veneration. If the idol was hollow, it was usual to introduce the heart into its mouth with a gold spoon. After these ceremonies, the body was thrown down from the top of the temple, where it was taken up by the person who had offered the sacrifice and carried to his house, where certain portions were cooked for the eating of himself and friends. The remainder was burned, or carried to the royal menageries, to feed the wild beasts.

* It may not be undeserving of notice to mention, that the Mexicans *adored the victim* as they did the deity to whom he was to be offered as a sacrifice. Herrera (*Hist. Amer.* iii. 207,) says expressly, "they also made gods of living men thus: they took a prisoner that was to be sacrificed, gave him the name of the idol he was to be offered to, put on him the same ornaments, and as long as that mockery lasted, which was sometimes a year, sometimes six months, &c., they paid him the same honor as they did to the idol; and when he went along the street, the people came out to adore him, and make their offerings, and brought out their children and sick persons, for him to cure and bless them," &c.

At some festivals, the priests skinned the victims, and for several days made their appearance in public with the skins thrown over and fastened on their persons. This was done especially in the worship of Xipe, god of the goldsmiths.

Besides human victims, the Mexicans also offered various animals to their gods; such as quails, falcons, rabbits, &c. Every day at sun rising, the priests made an offering to that luminary, of quails whose heads they cut off. This sacrifice was succeeded by the burning of certain gums, and with a loud accompaniment of musical instruments.

They also offered their deities flowers, fruits, oblations of bread, and cooked dishes of meat, together with much burning of copal and other gums, which were accompanied with prayers, prostrations, kneeling, fastings, making vows, &c.

"But while they were thus barbarous and cruel to others, it is not wonderful," says Clavigero, "that they practised inhumanity towards themselves. Being accustomed to bloody sacrifices of their prisoners, they also failed not to shed abundance of their own blood, conceiving the streams which flowed from their victims insufficient to quench the diabolical thirst of their gods. It makes one shudder to read the austerities which they exercised upon themselves, either in atonement of their transgressions, or in preparation for their festivals. They pierced themselves with the sharp spines of the aloe, and bored several parts of their bodies, particularly their ears, lips, tongues, and the fat of their arms and legs; through these holes, they introduced pieces of cane, at first of small size, and increased them in magnitude as they withdrew one to insert another piece," &c.

Though the Mexicans seem to have exceeded all other people in their bloody sacrifices, yet in self-inflictions many pagans of antiquity fully equalled them. In this manner the priests of Baal lacerated their flesh; (1. *Kings*, xviii. 28,) and the sanguinary chapter of the Calica Puran, (*Asiat. Res.* v. 387,) expressly directs the Hindus, to draw their blood by self-laceration from the various parts of the body; a ceremony practised by them with great devotion to this day. (*Ward's View of Hindoos*, iii. 17, 18, &c.)

Of the Mexican Priests.

The priests constituted not only an important class, but also a numerous body of the Mexican population. Clavigero thinks, there could not have been less than a million of them throughout the Mexican empire, employed in the service of the various idols, worshipped by that people.

The priests were divided into several different orders and degrees, which it is presumable, varied according to the practices of different nations. Each nation of which the empire was composed, retained their ecclesiastical polity according to ancient establishment, for their religion was not necessarily changed by the subjugation of the province to the dominion of the Mexicans; although they might be compelled to furnish these last with victims, for their special idolatrous service.

Of the priests properly so called, there seems to have been two orders; which, after Humboldt, (*Research*, i. 223,) we may call priests, and monks: the first called by the Mexicans Teopixquis, and the latter Tlamacazques.

The priests were governed by several different officers; the chief of whom were two high priests, to whom they gave the appellations of TEOTEUCTLI, (*divine lord*,) and HUEITOPIXQUI, (*great priest*.) These dignities were only conferred upon those distinguished for their birth, probity, and knowledge of religious rites and ceremonies. They were the diviners whom the kings consulted on the most important matters of state, and no war was undertaken without their approbation. They consecrated the king after his election, and officiated at the more solemn sacrifices.

The dignity of high priest was conferred by election; but we are ignorant whether the electors were political or priestly. The high priests of Mexico were distinguished by a tuft of cotton, which hung from their breasts; and at the principal festivals by splendid habits, upon which were represented the insignia of the god whose festival they celebrated.

Acting under the authority of the high priests, by whom they were also appointed, were various officers; such as a master of rites and ceremonies, superior general of the seminaries, composer of hymns, &c., whom it would be unnecessary to describe more particularly. To every division of the capital, and probably to every great city, was appointed a priest of superior rank, who acted as rector of that district, and ordered every act of religion which was to be performed within the bounds of his jurisdiction. All these rectors were subject to the authority of the *superior general of seminaries*.

All the offices of religion were divided among the priests; some were sacrificers, others diviners, some composers of hymns, and others choristers, who sung at particular hours both of the day and night. Some priests kept the temple clean, some took care of the altars; others were employed

in the instruction of youth, others in observing the calendar, ordering of festivals, and care of the mythological paintings.

The dress of the Mexican priests was in no manner different from that of the people in general, except a black cotton mantle, which they wore as a vail upon their heads.

They observed many fasts, and lived in great austerity of life, seldom or never tasting intoxicating liquors, and abstaining from all commerce with their wives, when employed in their religious duties.

The office of priest, among the Mexicans was not necessarily perpetual; though some dedicated their whole lives to this function. Others engaged themselves only for a certain time, after which they again followed secular employments. Nor was this practice confined to men alone; women often engaged themselves under similar vows, and performed almost every office of men but that of sacrificing, from which they were excluded. They were not, however, eligible to the higher dignities of the priesthood.

The Tlamacazques, or monks and nuns, were celibates of either sex, who devoted themselves to the worship of particular gods; of which those of Quetzalcoatl, were the most remarkable. According to Clavigero, they lived in monasteries, each sex apart, and their life was uncommonly rigid and austere. It would seem, that these celibates were dedicated to the idol by their parents, from infancy; but I presume they had the power to leave the monastery if they chose, when arrived at mature age. The superiors of these monasteries bore the same name as the god.

The monks of Tezcatlipoca, did not live together, but each one had his own habitation.

The monks of Centeotl, among the Totonacas, were required to be above sixty years of age, previous to their admission in the monastery. Their number was fixed, and when one died another was received in his place. They lived, says Clavigero, "in great retirement and austerity; and their life, excepting their superstition and vanity, was perfectly unimpeachable."

The priests and monks were supported by revenues allotted to the support of the temples, and by lands cultivated for their maintenance. This income, in addition to the offerings of individuals, was not only sufficient for their support, but an overplus was accumulated, which was distributed among the indigent laity.*

* Cortez, in his letters to Charles 5th, (*Humboldt, Pol. Ess. ii. 127.*) observes, that there were many beggars in the streets of Cholula, "who asked alms from the rich in the streets and market places, as is done in Spain and other civilised countries."

There is nothing particularly remarkable in the history of the Mexican priests and their monks and nuns. Among all idolatrous nations, though the general practice may have been different, yet continence and chastity have been always honoured, and those pagans who did not make religion subservient to their sensuality, have sought for purification of soul in austerities of every kind. Even among the lewd Syrians, the priests at times emasculated themselves, certainly not for debauchery, as is most strangely charged upon them by various writers.

Persons of either sex devoted to a life of religious celibacy, were to be found among all ancient nations, and the practice is yet followed extensively in eastern Asia.

Tertulian informs us, that among the worshippers of Mithras in his time, were celibates of both sexes, "Mithra habet et virgines, habet et continentes." (*Hyde, Rel. Vet. Pers.* 113.)

A profession of celibacy in convents, either of males or females, is common among the people of Siam, Pegu, Laos, Japan, &c., which they can renounce at any time, their vows not binding them for life.

In the Canary islands, (*Glas, Hist. Canaries*, 69,) at the time of their discovery, were found convents of religious women.

Of the Mexican Temples.

Among the most curious particulars of Mexican antiquities, were their idolatrous temples, which cost great labour and trouble in their erection; as may be seen from the following descriptions.

The great temple of Mexico, which occupied the centre of the city, was surrounded by a wall, enclosing a square space well paved with stone, which Cortez affirms, would have contained five hundred houses. This wall was built of stone and lime, very thick, about eight feet high, and ornamented with many stone figures of serpents, from which circumstance, it derived its name Coatepantli, or *wall of serpents*. There were four gates through this wall, one opposed to each of the cardinal points of the compass, and over each gate was an arsenal, containing a large supply of military weapons, and warlike equipments. Besides the principal temple, there were within the great area, according to Clavigero, forty smaller temples consecrated to various deities, several colleges of priests, and some seminaries for children.

The great temple, was an immense square mound of earth

and stones, so constructed as to represent a truncated pyramid with five stories or bodies; *i. e.* each of the upper bodies occupied a smaller space than the one immediately beneath, so that there was a space around the base of each body of five or six feet in width, whereon persons might walk round each of the stories.

The upper body was flat on the top, on which the temples proper were built, and other appurtenances of their worship were placed. The steps by which they ascended to the upper area, were not carried directly from the bottom to the top, but reached only from body to body, and were so contrived, that any one ascending to the top of the mound, had to walk four times round the whole mound, before he attained the summit. (*Clavigero, Hist. Mex. ii. 31.*) The mound was faced with stone, and its dimensions according to the best authorities, were 320 feet square at the base, and 120 feet high. (*Gomara, in Purchas, iii. 1133. Humboldt, Pol. Essay, ii. 15.*)

Though Clavigero asserts, there were two towers erected on the upper stage, he admits, that there is some difficulty in ascertaining the precise truth respecting the fact. I shall therefore venture to differ from his conjectures on this particular, and follow the account of Bernal Dias; (*Conq. of Mex. 146, 148.*) who says, there was but one tower, which appears to me also to be the relation of Gomara, (*Purchas Pilgrims, iii. 1133.*) if rightly translated. With this exception, Clavigero's account I presume is correct; for what he says of one tower or chapel being dedicated to Huitzilopochtli, and the other to Tezcatlipoca, is in effect the same with the account of Bernal Dias, who says, that in the one tower he describes, were two highly adorned altars, one dedicated to each of the above deities, and over which their idolatrous images were placed.

Before the tower or sanctuary, according to Clavigero, were two stone stoves of the height of a man, in the shape of the pyx. In these were maintained perpetual fires, and with whose extinguishment the Mexicans apprehended the greatest calamities.

On the upper stage, but close to its edge, was that large convex stone upon which they extended their human victims, which were sacrificed in the manner already noted.

The principle strikingly evident in the construction of this temple, is the same with that of the oldest building recorded in history: to wit, the tower of Babel, which, with Bochart, (*Phaleg. chap. ix.*) I consider was that described by Herodotus and Diodorus Siculus, as the temple of Jupiter

Belus. "Credo eam turrim post dispersationem diu stetisse, adeoque illam esse turrim quæ Belo deinceps consecrata est, quam multis describit Herodotus lib. i."

The temple of Belus was at its base, a square of a furlong on each side, and consisted of eight towers or bodies appearing to be built one above the other. The ascent to the top was by stairs on the outside, formed by a sloping line from the bottom to the top, passing eight times round, so as to exhibit the appearance of eight towers. In these different towers or bodies, were many rooms and apartments devoted to idolatrous and astronomical uses.

In this temple two distinct deities were worshipped; one the supreme God of Heaven, while Belus was the delegated god upon earth. (*Herodotus, lib. i. clxxxi, &c.*)

These particulars of idolatrous worship, complete the perfect analogy that exists between the Mexican and Babylonian temples: for the American people worshipped in like manner two deities as we have already stated, one being the god of war and protector of Mexico, the other the supreme god Tezcatlipoca.

It is almost needless to add to this description the confirmatory declaration of Baron Humboldt, who in various parts of his valuable writings, calls the attention of his readers to these evident analogies. It will be sufficient for the present, to produce the following quotation. "It is impossible to read the descriptions, which Herodotus and Diodorus Siculus have left us of the temple of Jupiter Belus, without being struck with the resemblance of that Babylonian monument, to the teocallis (temples) of the Mexicans." (*Humboldt, Res. i. 82.*) The chapter from whence this extract is made, is one of great interest, containing descriptions of other pyramidal temples, yet existing in the kingdom of Mexico, and notices of several remarkable features of their construction, resembling ancient monuments of the eastern continent; which as far as the nature of our essay will justify we shall introduce, that our readers may have every opportunity of judging of the character of these curious monuments of ancient Anahuac.

"At the period when the Mexicans or Aztecs, one of the seven tribes of the Nahuatlacks took possession in the year A. D. 1190, of the equinoctial region of new Spain, they already found the pyramidal monuments of Teotihuacan, of Cholula, and of Papantla. They attributed these great edifices to the Toltecas, a powerful and civilized nation who inhabited Mexico five hundred years earlier, who made use of hieroglyphical characters, who computed the year more

precisely, and had a more exact chronology, than the greater part of the people of the old continent. The Aztecs knew not with certainty what tribes had inhabited the country before the Toltecas, and consequently, the belief that the temples of Teotihuacan and of Cholula were the work of the Toltecks, was assigning them the highest antiquity they could conceive. It is however possible, that they might have been constructed before the invasion of the Toltecks, that is before the year 648, of the vulgar era."* (*Humboldt, Res. i. 82.*)

With this introduction, which happily connects, in a few words, the doubtful history of the origin of these monuments with the chronological epochs of Mexican history, we shall now proceed to describe as briefly as possible, the pyramidal temples to which he has alluded.

The most ancient, as well as the largest of these pyramidal temples, is that of Cholula, which we have already noticed was dedicated to Quetzalcoatl the god of the air. It consists of four stories, all of equal height, and appears to have been constructed exactly in the direction of the four cardinal points; but as the edges of the stories are not very distinct, it is difficult to ascertain exactly their primitive direction. Its perpendicular height is 177 feet, and each side of its base 1,423 feet: its base is therefore twice as broad as the largest Egyptian pyramid, but its height is little more than that of the third, or pyramid of Mycerinus.

It is composed of unbaked brick,† alternating with layers of clay; and in its interior, as in other teocallis, there are considerable cavities, which were discovered a few years before Humboldt's visit to Mexico on cutting a road through the lower stage or body of this monument. From this circumstance, a square room was discovered in the interior of the pyramid, built of stone, and supported by beams made of cypress. In this chamber were found two skeletons, some idols of basalt, and a great number of vases curiously painted and varnished. It is said there was no entrance to this room, which would imply, that the skeletons were of persons who had been enclosed there when the pyramid was built. (*Humboldt, Res. i. 88.*)

The two pyramids of Teotihuacan, are situated eight leagues N. E. of Mexico, and were formerly consecrated

* Siguenza, an eminent Mexican antiquarian, considered the pyramids of Teotihuacan to have been built by the Olmecks; a race, of whose emigration to Anahuac we have no account. (*Clavigero, Hist. Mexico, i. 117, note.*)

† Humboldt, (*Res. i. 106.*) considers it possible, that the bricks may have been slightly burned, and that the humidity of the air may have rendered them friable.

according to Mexican tradition, to the sun and moon. They were composed of clay mixed with small stones; and then coated with a thick wall of porous amygdaloid. Traces of a coat of mortar of lime, may be seen covering the stones on the outside. The Indian tradition says, they are hollow, a fact however which has not been yet verified. Originally they consisted of four stories, of which but three are now discernible. The height of the pyramid of the sun, in its present state is 180 feet, with a base of 682 feet. The pyramid of the moon, is 36 feet less in height, and its base much smaller than that of the sun.

Around these pyramids, which stand in a plain called *Micoatl*, or *road of the dead*, are several hundred small pyramids, laid off in streets, in exact lines from N. to S., and from E. to W., which it is certain enough, designated the burying places of the chiefs of tribes. This circumstance, so analogous with the disposition of the small pyramids around those of Memphis, induces Humbolt to exclaim, "what analogies with the monuments of the old continent! and this Tolteck people, who on arriving in the seventh century on Mexican soil, constructed on a uniform plan several of those colossal monuments; those truncated pyramids divided by layers like the temple of Belus at Babylon, whence did they take the model of these edifices? Were they of Mongol race? did they descend from a common stock with the Chinese, the Hiong-nu, and the Japanese?" (*Humboldt, Pol. Essay*, ii. 45.)

We purposely omit the description of the pyramid of Papantla, which was of similar construction but much smaller, and built of hewn stone; as well as any description of the numerous small temples of the Mexicans, which were composed of a small single mound with the steps leading directly to the top.

The prejudice of considering the Tolteck or Mexican nations, to have emigrated to America from Asia in comparatively modern times, is the only circumstance that embarrasses the curious fact, that these American temples have been constructed upon the plan of the tower of Babel. But why may we not assign to this western continent, at least a part of its population immediately derived from the plain of Shinar; whence, as we are assured in the Scriptures, mankind were scattered "*abroad upon the face of all the earth*," and which as far as I can perceive, is a supposition not more improbable, than that they arrived in this continent at a latter period?

There can be little doubt, that the pyramidal style of tem-

ple-building, is the most ancient recorded in the history of idolatrous worship. It is not only to be observed in the antiquities of the early civilized nations of Asia, but it has from peculiar circumstances, continued among those nations, who from various physical causes, have been secluded from a general intercourse with their fellow men. As there are circumstances connected with these pyramidal or montiform temples, of an entirely arbitrary character, we cannot consider the uniform resemblance they bear to each other, as having been fortuitous, but on the contrary, that they have been derived from one type, which I think will be eventually shewn, was that tower of Babel,* from whence mankind were dispersed over the earth. But before we venture to speculate upon this subject, it will be proper to shew how far we are supported by facts.

In travelling over those countries in which the first post diluvian monarchies were erected, we shall find these great pyramidal mounds still remaining, where cities have disappeared, and where their names have even been forgotten. Thus Sir R. K. Porter, (*Travels in Persia, &c.*, ii. 280,) observes, "immense pyramidal piles seem to be the peculiar marks, by which we may discover at least the sites of the earliest settlements of mankind." Similar observations have been made by Buckingham, (*Travels in Messopotamia*,) and Keppel (*Travels, &c.*, i. 274, 288, 290, &c.) frequently describes the ruins of large mounds in this most anciently settled part of the earth.

The ancient idolatrous worship in *high places*, so well known in the history of the Jews, testifies to the same antiquity of idolatrous practice. Where hills or mountains were conveniently situated, they were no doubt made use of for such purposes; but in plains or level countries, they erected their montiform temples by human labour. Numbers of these mounds are yet to be seen in Syria. Volney (*Travels in Egypt and Syria*, ii, 165,) observed many in the Pachalic of Aleppo, one of which he describes as being 1400 feet in circumference, and 100 in height.

The most ancient pyramids of Egypt at Sakara, Salahaye, &c., (*Norden, Travels*, i. 148, plate 65. *Ld. Sandwich's, Tour*, 461,) consisting of four or five stages or bodies, are on the same plan with the Babylonian temple. And even

* By this we are not to be understood as asserting, the tower of Babel was a model which they simply undertook to imitate, but that the continuance of those peculiar views, that originally led to the erection of that montiform temple, had influenced men elsewhere to make similar temples. Yet even of the very tower of Babel, we have shewn the Tolteck nations had preserved a remembrance.

the pyramids of Memphis or Gize, though to a certain degree departing from this original plan of construction, are nevertheless instances in point. In the Egyptian temples, Bruce (*Travels*, i. 127,) remarked the truncated pyramidal style, which may be verified by an examination of the drawings of Luxor, Apollinopolis or Etfu, Philoe, &c. as represented by various travellers in Egypt.

It may be said that these Egyptian pyramids are tombs, which we do not dispute, at least in part, believing with Faber, (*Origin of Idol.* iii. 297, &c.) that they were mythological tombs, which constituted the first departure from the original montiform temple; a further departure may have made them real tombs for kings and priests, as was also partially done by the Mexicans.

Kæmpher (*Hist. Japan*, i. 32,) describes the temple of Puka-thon in Siam, to be a pyramid divided into four stories, one built over the other, and leaving a space around the base of each story whereon persons might walk. Instead of being flat on the top, it terminates in a lofty spire, which, however, is an immaterial variation: around its base are the dwellings of the priests.

The temples of Godama, (*Budha*,) among the Burmas, are of the same style and character. Dr. Buchannan (*Asiat. Res.* vi. 293,) describes them, as being built sometimes of solid brick work, at other times hollow, placed on prodigious elevated terraces, and raised from three to five hundred feet in height. The bases of these immense pyramidal temples, are frequently surrounded by a double row of small pyramids, as may be seen in Symes' Embassy to Ava, ii. 62; plate 3.

We shall not stop to notice instances less conspicuous in India, or China. The pyramids of Tanjore and Deogur of the first named, are well known;* and all writers mention the mound of fifty feet high, which is an essential part of the annual agricultural festival of the latter. The Scythians (*Herod Melp.* ii. 235,) erected mounds of wood, which we suppose, were similar to the one built by Atilla, which Gibbon (*Decline*, &c. v. 44,) says, was three hundred feet square.

In the larger islands of the Pacific ocean, the morais of the natives have a similar pyramidal character. Cook (*Second Voy.* ii. 567,) describes the morai of Oberea, as a "prodigious pile of stone, two hundred and sixty-seven feet in length, and

* Mr. Burrow (*Asiat. Res.* ii. 477,) also makes mention of the ruins of a large pyramidal building in Hadjipore, which he compares to the pyramid of Dashour in Egypt. This instance seems little known.

eighty-seven wide at the base. It is raised by flights of steps to the height of forty-four feet, narrowing gradually till they end in a small entablature, &c. This work being solid, and without a cavity, will last as long as the island itself, and no time that will not equally affect the island can destroy it."

Other and similar monuments at Otaheite, the Sandwich, Friendly islands, &c., may be seen described in Cook's third voyage, iii. 6; Voy. N. Hem. i. 262, 313, 318; Missionary Voy. 279, &c.

We shall merely add to the descriptions already given, the fact that numerous small artificial mounds are found among all the ruder nations of the world; which in all probability have been partly raised for similar purposes. See article Taph, Taph, &c., Bryant, Anal. Anct. Myth. i. 93, 449, ii. 54, &c.

Small temples on the Mexican plan, with stairs on the outside, are still erected in the kingdom of Nepal. (*Asiat. Res.* ii. 310.) To the same purpose, at least in part, we ascribe many of those mounds found in our western country; which we shall hereafter describe more particularly in another chapter.

In the preceding brief description of idolatrous temples both of ancient and modern times, we consider that we have exhibited the fact, that they are decidedly constructed upon the pyramidal type, which some perhaps might suppose would be the most probable shape they would assume among all nations, whose civilization had not attained to a certain degree of perfection. But the ancient Chaldeans, Egyptians, and Hindoos were highly civilized; and even the Mexicans can hardly be considered a rude nation: yet why have they worshipped their gods either on mountain tops, or erected vast mounds near their habitations, whereon they could perform their idolatrous rites? Whence that singular attachment to worship on *high places*, that so frequently appears in the history of the defections of the Jewish nation, so that even Solomon after building the magnificent temple at Jerusalem, yet in a latter year of his life built a *high place* for Chemosh? (1. *Kings*, xi. 7.)

But it is evident from the mythological histories of antiquity, that there was an object especially significant in these montiform temples, which I cannot but consider has been fairly developed by the ingenious researches of Bryant, Faber, and the members of that illustrious society of Calcutta, whose investigations have thrown so much light on the early history of mankind.

On referring to the history of the confusion at Babel, we find that all mankind, then dwelling together as one large

family in the plain of Shinar, undertook to erect a stupendous building, whose exact purpose we cannot directly ascertain from the sacred records. But it is evident it must have been undertaken upon some defined and intelligible principle, or else men would not have wasted their time and labour upon a work of such magnitude. We can hardly doubt, but that it was connected with that incipient system of idolatry, which was afterwards developed in Chaldea, Egypt, Persia, &c., to that astonishing degree, that in less than five hundred years after the dispersion, when the call of Abraham took place, it would seem that the knowledge and worship of the true God had been so entirely corrupted, that a new revelation to that patriarch was made; and it is not equivocally stated, that his family also, were idolaters like the rest of the world. (*Joshua*, xxiv. 2.)

As the history of the tower of Babel is so intimately connected with our present investigation, and as it will be found to give a solution to some other subjects of apparently great obscurity, we shall now proceed to introduce the learned and ingenious opinion of Faber, which happily explains the object of that erection, and the commencement of pagan idolatry; whose apparent mysteries have been so ingeniously explained by Bryant and himself.

Mr. Faber considers that the ark in which Noah and his family were preserved from the awful destruction that overwhelmed the antediluvian world, continued for some time on mount Ararat, the habitation of the patriarch and family. As his posterity increased in numbers around this mountain, the ark would be ever before them to remind them of their fathers' wonderful preservation, and the consequent regeneration of the human family, in which his immediate descendants must have experienced no ordinary emotions. It would require too much of our time to detail all the matters of local interest connecting the history of mount Ararat, the ark, and the regeneration of mankind together in this most interesting locality. It must be sufficient for us to remark, that here also the worship of the true God, according to the rites he had revealed to Noah, was practised under that probationary system to which, as a free agent, God has universally subjected mankind. Here also were preserved to a greater or less degree, a knowledge of antediluvian arts and sciences, which were to serve useful purposes in the renovated world. In fine, as Faber has well expressed it, the ark was a microcosm, a little world, containing every thing interesting in the early history of mankind.

After the death of Noah and his three sons, Mr. Faber

supposes mankind to have journeyed from Ararat to the plain of Shinar, especially under the guidance of Nimrod and the family of Cush. Even at this early time, they had to a certain degree corrupted the religion of their forefathers; which I think it not improbable, had been hastened by certain speculative opinions of the antediluvian infidels, which either historically or unheedingly had been imparted to them by the relations and communications of those, who had been acquainted with such things before the flood. But however this may have been, Mr. Faber supposes, that when they arrived at the plains of Babylon, they presently undertook the erection of the tower mentioned in the Bible, as a symbolic representation of that mountain upon which the ark first rested; and which most probably, had coincided geographically with the garden of Eden, and the paradise of our first parents; a circumstance that has not been overlooked in the mythological figments of antiquity.

As the tower was not completed, at least at this time, for mankind were interrupted in the work, and dispersed over the earth, and as we have no history coeval with these times, we can only conjecture from mythological traditions of much later date, and when the departure from the worship of the true God had been almost carried to its greatest extent, that men intended here to represent scenically, yet religiously, the events of the diluvian history, blended with those speculative opinions they appear to have imbibed at a very early period, concerning periodic destructions of the world, and regenerations of mankind. These they may have erroneously inferred from the history of the primitive fall of man and his expulsion from Eden; from the destruction of the antediluvian world by the flood; and by a prospective view of that final consummation of all things, when man should regain that blissful state, from which he had fallen through the artifices of the tempter. But without going further into this investigation at present, I think it evident from the various authorities produced by Faber, (*Origin of Pag. Idol.* ii. 193, &c.) that the tower or Babel was a symbolic representation of mount Ararat; and a confirming proof of the correctness of his theory, will be found in the tradition of the Cholulans concerning the history of the erection of their montiform temple; a circumstance with which Faber appears to have been entirely unacquainted. Though we have previously related that tradition, we deem it too important, as throwing light upon a subject connected with the history of man, to be omitted at the present time. That tradition relates, that after a universal deluge, in which the human race had been des-

troyed with the exception of seven individuals, who had saved themselves in a cavern on mount Tlaloc, that Xelhua, one of these persons, (giants) surnamed the architect, went to Cholula, where "*as a memorial of the mount Tlaloc, which had served as an asylum to himself and his six brethren, he built an artificial hill in the form of a pyramid.*" The gods beheld with wrath this edifice the top of which was to reach the clouds, and hurling fire on it, destroyed many of the workmen, and caused the work to be discontinued."* (*Humboldt, Res. i. 96.*)

In this tradition, in which the history of the tower of Babel is applied to the pyramid of Cholula, we have its object most distinctly stated, and in a manner which establishes the authenticity of the tradition, as being original and not derived from the Spanish priests, who were not only ignorant of any such system as that developed by Faber, but who would never have instructed the natives, that seven persons instead of *eight* survived the flood, or that the displeasure of the gods was ever manifested on the pyramid of Cholula.

Thus we think, that the antiquities of Mexico have thrown an important light upon the ancient history of the world, and have at least in this one particular, given a firmer basis to those theories, which explain so many important features in the moral history of man, and enable us to comprehend some of the mysteries and allegories of ancient paganism, which at one time entirely overshadowed the earth. As the researches of learned men have abundantly shewn that the principles of idolatrous worship originated at that early period of time when all mankind were living together as one family or nation, what so probable, nay, what other model could they have followed, in constructing their temples after the dispersion from Babel, but that tower which was essentially connected with their idolatrous system; and which we have indeed proved, has been assumed as the model of religious buildings, all over the earth?

It may be possibly insisted, that according to our views the pyramidal style of temple building should be more uni-

* "Rios, to prove the high antiquity of this fable of Xelhua, observes, that it was contained in a hymn which the Cholulans sung at their festivals, dancing round the temple, (*teocalli*) and that this hymn, began with the words, *Tulanian hululaez*, which are words belonging to no dialect at present known in Mexico. In every part of the globe, on the ridge of the Cordilleras, as well as in the isle of Samothrace in the Egean sea, fragments of primitive languages are preserved in religious rites." (*Humboldt. as quoted in the text.*) Of this nature were the words *conx, om, pax*, used in the mysteries of Eleusis, which have been found in the Sanscrit, and explained *As. Res. v. 300.* For a most extraordinary preservation of Chaldee words in the Druidical mysteries, see Faber, *Orig. Idol. iii. 170.*

versal than we have proved to be the case. To this objection we beg leave to answer, that we have produced but a few of the instances we might have done, had we deemed it proper. But we have alone contended, that the *most ancient* artificial temples were of this construction; not denying the corruption of the ancient idolatry itself, which as it lost sight of the worship of the true God, in like manner forgot its own original constitution, and departed to a very great degree from its scenical representations. We may also add, that the temple properly speaking, was situated on the pyramidal mound, and that when the symbolic meaning of the mound was lost, it might seem an excessive labour to construct these imitative mountains, without discerning their object, and which removed the temple, upon which all the ornamental decorations of art were displayed to an inconvenient distance, besides circumscribing them in magnitude. For neither an extensive, nor perhaps even a marble temple at all, could be erected on an artificial mound; whose want of solidity may be estimated by the almost impossible attempt, of building an ordinary house upon what is called made ground, without its walls giving way.

Of the Cosmogonical and Traditional History of the Mexicans.

The Spanish authors who have written upon Mexican antiquities, have not related to us the peculiar opinions of the Mexicans concerning the origin of the material world; or whether they thought it to have been eternal: but they all remark, that like various Asiatic nations, the Mexicans considered the history of the world to have been divided into four or five great periods, analogous to the *Yugs* of the Hindoos; or to the more commonly known *Ages* of ancient Greece.

Thus they said, that four times previous to the present age the sun had been destroyed, and that all mankind, with the exception of two or three individuals, had perished in certain universal catastrophes of nature. From the persons thus preserved, the world had been replenished with inhabitants five several times, while as many different suns had risen to illuminate the renovated world.

The first sun or age of the Mexicans, was called *TLATONATIUH*, or age of the earth, which lasted according to Mexican manuscripts consulted by Humboldt, (*Res.* ii. 19,) 5206 years, and according to Clavigero, (*Hist. Mex.* i. 329,) until the ruin of the giants, and the great earthquakes. But

Humboldt asserts, it was terminated by a universal famine, and its consequent desolation, from which but two men and one woman escaped, who became the parents of those who lived during the second age.

The second sun or age was called TLETONATIUH, or age of fire, which lasted 4804 years. It was terminated by a very great conflagration, which consumed every animal but the birds, who flying upwards in the air avoided its fury. But one man and woman were preserved from the universal destruction by hiding themselves in the recesses of a cavern.

The third sun, EHECATONATIUH, the age of wind or air, continued 4010 years, and was terminated by hurricanes; which is said, if rightly deciphered, to have destroyed the human race excepting two men, who were saved in a cavern as in the preceding catastrophe.

The fourth sun, ATONATIUH, or age of water, continued 4008 years, and was terminated by a deluge, which destroyed mankind to the exception of one man and his wife, who saved themselves in a canoe from the destruction of the waters. These individuals are known by the names of Coxcox, and his wife Xochiquetzal; and from them are descended the present race of men.

Upon these suns or ages, Humboldt (*Res.* ii. 25,) makes the following observation: "If the duration of the Mexican *four suns*, were longer by three years; and if for the numbers 5206, 4804, 4010, and 4008 years, the numbers 5206, 4807, 4009, and 4009, were substituted, we might suppose, that these cycles originated from a knowledge of the lunar period of nineteen years. But whatever be their real origin, it does not appear less certain that they are fictions of astronomical mythology, modified either by an obscure remembrance of some great revolution which our planet has undergone, or according to the physical and geological hypothesis," &c.

The very near approximation of these numbers, to those arising from a multiplication of the cycle of nineteen years, can hardly be considered fortuitous. But we feel ourselves unable to enter upon a further astronomical discussion, where we not only are entirely deficient in materials, but it is even necessary that the duration of these periods be determined; for there is a discrepancy between them as given by Humboldt, and as related by Mexican writings of great authority; as may be seen in Humboldt, *Res.* ii. 28.

The analogy which these suns offer to the Yugs of the Hindus, and to the poetical ages of the Greeks, is too evi-

dent to require any comment. The system is of the greatest antiquity, and has been widely extended. The Persians, the most ancient of postdiluvian nations, also recognise the division. (*Bailly, Hist. Astron.* i. 108.) The people of Thibet, and other nations of the east, &c.

It is not clearly expressed by any of the Mexican historians accessible to me, whether their cosmogonical revolutions are four or five; i. e. whether the fifth sun, which is the present one, is the reappearance of the TLATONATIUH or age of the earth, or really a fifth period of time. The Hindu system of Yugs, seems to require us to consider them perfected in four revolutions, of which the present is the fourth or *Caly Yug*; but on its termination, the *Sata Yug* again commences the series of renovations.

On the whole, however, I am inclined to think, that the Mexicans considered the present *sun* or age a distinct fifth period, which is a division apparently of great antiquity, being known to the people of Thibet, (*Humboldt, Res.* ii. 31,) as also to the ancient Greeks. Thus Hesiod says, "Oh why did fate ordain me to be among the men of this *fifth* age." (*Opera et Dies*, 174.)

I have already stated, that a division by fifths, (page 220.) appears to characterise the ancient astronomical systems of Asia, and which is seemingly supported by the fact, that the Egyptians, Chinese, Hindoos, Japanese, &c., recognise the universe as composed of five elements: (*Diod. Sic. lib.* 1. chap. 1. *Du Halde, Hist. China.* iii. 92. *Sir Wm. Jones*, vii. 92. 96. *Kæmpfer, Hist. Japan*, i. 157,) each of which in rotation, might be supposed to exercise alternate domination over the world, a compound of them all.

Following the account which relates Coxcox to be the progenitor of the present race of men, we find the Mexican tradition reports, (*Clavigero, Hist. Mex.* ii. 5,) that when mankind were overwhelmed with the deluge, none were preserved but a man called *Coxcox*, or as he is otherwise known *Teocipactli*, and a woman called *Xochiquetzal*, who saved themselves in a little bark, and landed upon a mountain called Colhuacan. They had there a great many children, whom the Mexicans report, were all born dumb, until a dove from a lofty tree imparted languages to them, but differing so much that they could not understand each other. (*Clavig. Hist. Mex.* ii. 5. *Humboldt, Res.* ii. 64.)

The people of Mechoachan preserved a tradition, that Coxcox, whom they call *Tezpi*, embarked in a spacious vessel with his wife, children, various animals, and vegetables, whose use was important to man. After the waters began

to decrease, Tezpi sent out from his ark a vulture to ascertain the state of the waters, but this bird, which feeds on carrion, did not return to him, in consequence of the number of dead bodies which were to be found every where strewed on the earth. Tezpi then sent out other birds, of which the humming bird alone returned, holding in its beak a branch covered with leaves. Tezpi seeing that the earth had began to produce vegetation, left his vessel near the mountain of Colhuacan. (*Humboldt, Res. ii. 65. Clavig. Hist. Mex. iii. 151.*)

To these remarkable traditions, so consonant with the narration of the Scriptures, we shall add no comment, as indeed they require none; and if any doubts, as to their originality are suggested, we consider them removed by the candid and impartial evidence of Humboldt, whom no one will charge of undue bias on this subject. (*See his Researches, i. 196, ii. 60, 64, &c.*)

But, like the cosmogonical systems of other pagan nations, the Mexicans embarrass our speculations, by the variety of their traditions concerning their ancient history. Thus we have just seen that they deduce their origin from Coxcox, yet in some manner which we are now unable to explain, they also say that the Nahuatlacks, or the seven nations of Mexico, (page 177) came forth from seven caves; which piece of history is designated in their hieroglyphic paintings, (*Acosta, Hist. lib. 7.*) by a drawing of seven caves, and men coming forth from them. See also Humboldt, *Res. ii. 32.*

This tradition, which is also found among the Peruvians slightly modified, is not however an arbitrary one in our opinion, but seems to be similar to the legendary histories of the Hindus concerning their seven *Rishis*, and the seven heroes of the Druids mentioned by Taliesin, besides other analogous traditions, which Faber (*Orig. Pag. Idol. iii. 167.*) considers, with every appearance of truth, to have relation to the family of Noah escaping from the deluge. But an investigation of this subject though curious and interesting, would lead us too far from the proper discussions of this essay, and we therefore only deem it necessary to call the attention of the inquisitive reader to these facts, which are well worthy of consideration.

But from these very remote times, evidently connected with the original history of mankind, we have no other circumstance of Mexican tradition that seems to connect them with the eastern continent, and their particular history presents a vast *hiatus*, extending from the early postdiluvian ages until a few centuries preceding the arrival of the Spa-

niards. They are then represented as having emigrated to the land of Mexico, from some region or country to the north; which will now be the subject of our particular investigation.

It will be seen on referring to page 175, where we have given a brief account of the various nations inhabiting Anahuac, that though the origin of the Olmecs, Xicalancas, &c., is entirely unknown, yet tradition has preserved a distinct remembrance of the emigration of the Toltecks, and some other tribes, to the kingdom of Mexico.

When we consider the degree of civilization possessed by the Toltecks and Mexicans, and the singularity of their institutions, it becomes a most interesting subject to ascertain from what country they emigrated; more especially, as most writers have considered them to have been Asiatic tribes, who had just previously found their way into America, and were now descending towards the more southern parts of the continent.

It will require, however, but little examination to prove, that this supposed emigration from Asia, is but a hasty conjecture entirely unsupported even by plausible facts. These various tribes of Toltecks, Chechimecas, Acolhuas, and Nahuatlacks, consisting of some thousands of individuals, spoke the same language, (*Clavig. His. Mex.* i. 144. *Humboldt Researches*, i. 214,) and as their emigrations took place at various periods of time, from A. D. 544 to 1245, it is impossible that they could have been Asiatic strangers just entering America; for we should be able from the lateness of the time, to ascertain either from their language* or history, the country and people of Asia from whence they had emigrated. And when we add to this, the entire dissimilarity in the minutiae of their religion, astronomy, arts, and social institutions, from any nation of Asia, we must be convinced, that the emigration related in Toltecan or Mexican tradition, refers to one from some part or other of North America alone.

* It is perfectly fair to make this estimate from known facts in the history of languages elsewhere. The Arabic, has been spoken nearly four thousand years. Mr. Champolion, by his researches upon the Egyptian hieroglyphics, has demonstrated that the Coptic was the language used in the most ancient inscriptions of that ingenious people. An instance, however, more in point with the subject of our text, has been communicated by Eustace. (*Class. Tour.* i. 142) He informs us upon the authority of Lanzi and Maffei, two eminent Italians, that a part of the Cimbri and Teutones who were defeated by Marius, B. C. 100, near Verona, fled to the mountains in the neighborhood, where their descendants still continue to the number of seven parishes. The late king of Denmark visited them, and discoursed with them in the Danish language, and found their idiom perfectly intelligible.

It is, however, no easy matter to ascertain their original countries, for though they respectively call them Aztlan, Huehuetlapallan, Amaquamecam, Teocolhuacan, &c., yet these names might not be retained by other tribes, who took possession of their deserted lands. At any rate, they have hitherto been undetected, and little hope remains of our discovering these ancient countries, unless a part of the original population remained behind, or that monuments bearing their characteristic features, are yet to be discovered, which will then determine the ancient seat of their empire.

The most likely place to seek these ancient countries, is in that unexplored part of North America which lies between the Columbia river and the Gila of California: for upon the banks of the latter river, are yet found those ancient edifices, called by the Spaniards the *Casas Grandes*, of which the reader will see in our note* an imperfect account, and which tradition reports, were erected by the Mexicans when on their journey to Anahuac. Their first station or original country, is supposed to have been upon the borders of a lake much further north, known by the name of Timpanogos, which is partially sketched in our recent maps, but I believe without any geographical authority though it may be a tolerably correct supposition.

That the population of this almost unknown country is really superior to the ordinary Indian or barbarous nations, would be unreasonable to doubt, from the accounts given of those Spanish adventurers whom an accursed thirst of gold, induced at an early period to invade these regions.

These accounts, for a long period of time, have been almost entirely disregarded by European historians, as devoid of truth and probability. More recently, however, we have received some information on the subject, which tends directly to confirm the early narratives of the Spaniards concerning Cibola, perhaps not without some exaggeration, but I would presume without gross and wilful misrepresentations.

* "These ruins occupy a space of ground of more than a square league. The *Casa Grande*, is exactly laid down according to the four cardinal points, being from N. to S. 445 feet in length, and from E. to W. 276 feet in breadth. It is constructed of clay rammed into large moulds, (*pises*) which are of unequal sizes but symmetrically placed. The walls are four feet thick. We perceive, that their edifice had three stories and a terrace. The stair was on the outside, and was probably of wood. We perceive in the *Casa Grande*, five apartments, each of which is 27 feet in length, 10 in breadth, and 11 in height. A wall, interrupted by large towers, surrounds the principal edifice, and appears to have served to defend it. Father Garces discovered the vestiges of an artificial canal which brought the water of the Rio Gila to the town. The whole surrounding plain is covered with broken earthen pitchers, and pots prettily painted in white, red, and blue." (*Humboldt. Pol. Ess.* ii. 205.)

However, before we give a sketch of the state of society observed by these early adventurers, we shall prepare our way, by the more recent statements given us by Baron Humboldt, (*Polit. Essay*. ii. 206, 215,) who derived his information from two Spanish monks who partially explored these countries A. D. 1773. "In the country of the Moqui, watered by the Rio de Yaquesila, they were astonished to find an Indian town with two great squares, houses of several stories, streets well laid out, and parallel to one another. Every evening, the people assembled together on the terraces of which the roofs of the houses are formed. The construction of the edifices of the Moqui, is the same with that of the *Casas Grandes* on the banks of the river Gila. Every thing in these countries appears to announce traces of the cultivation of the ancient Mexicans. We are informed even by the Indian traditions, that twenty leagues north from the Moqui, near the mouth of the river Zaguánas, the banks of the Nabajoa were the first abode of the Mexicans after their departure from Aztlan. However, the language spoken by the Indians of the Moqui, the Yabipais, who wear long beards, and those who inhabit the plains in the vicinity of the Rio Colorado, is essentially different from the Mexican language."

"To the south of the Rio Gila, these missionaries found the Indians clothed, and assembled together to the number of two or three thousand in villages which they call Uturicut and Sutaquisan, where they peaceably cultivate the soil. Here they saw fields sown with maize, cotton, gourds," &c.

With these brief testimonials, as to the present character of the natives of this part of America, who our readers cannot but perceive are entirely different from those nations we have termed barbarous, we shall proceed to give a concise view of the observations made in this part of America, at an early period after the conquest of Mexico. As they were made above two hundred years preceding the statements just given from Humboldt, it would not be unreasonable to suppose, that important changes may have occurred during that time, and that their civilization may have retrograded. But in truth we know nothing of the present state of the country other than from the meagre relation given by Humboldt.

The first Spanish traveller into these regions, (*Herrera, Hist. Amer.* v. 203,) afterwards so famous under the names of Cibola, Quivira, &c., was Mark di Niza, a Franciscan monk, who by order of the Spanish governor of New Galicia, in A. D. 1539, made an exploratory missionary journey to some distance, but how far we are unable to ascertain. He reported, that there were towns and cities in this country,

built of stone, the houses of several stories, and flat roofed. One town or city called Cibola, seemed to him larger than Mexico when viewed from a distance, for he did not venture to approach it closely. He also speaks of seven towns or cities, pleasantly situated in one kingdom in which the Indians informed him, there was gold in abundance. He speaks of having seen the natives of the country wearing necklaces of turquoise stones, and some with such stones passed through their noses and ears. These people when they felt the woollen garment of the monk, informed him, that similar fabrics were made in the town of Tontecac from the fur of some animal, which they represented as being of the size of the greyhound brought by the friar's companion. The natives in general, are described to have been dressed in cotton clothing and cow's hides. (Buffalo robes.)

Friar Mark also says, that he saw one of the natives of Cibola, who was a *white man*, of a good complexion and capacity. (*Hackluyt*, iii. 370.) Some Indians on the coast also told Alarchon, that there were white men up the country, but that they knew nothing else. (*Hack*. iii. 429.)

In consequence of the relation made by friar Mark of the industry, population, and gold of the natives of Cibola, the rapacious Spaniards immediately marched an army into this country, which after some difficulty, reached the places to which they had been directed by a cupidity inflamed by the friar's narration. But as these villains were disappointed in not finding gold, silver, and precious stones, they charged the friar with having told great falsehoods, when at most he had been guilty only of exaggeration; for it is evident from their own relation, that, on the whole, friar Mark's account was not incorrect.

This we may distinctly perceive from the letter which Coronado wrote to the viceroy Mendoza, A. D. 1540, after he had reached Cibola with his army and was disappointed in his hope of plunder. (*Hackluyt, Voy.* iii. 373, &c.)

"Briefly I can assure your honor, the father (friar Mark) said the truth in nothing that he reported, but all was quite contrary, save only the names of the cities and great houses of stone; for although they be not wrought with turquoise stones, nor with lime nor bricks, yet are they very excellent good houses, of three, or four, or five stories high, wherein are good lodgings and fair chambers, with ladders instead of stairs, and certain cellars under the ground, very good, and paved, which are made for winter; they are in a manner like stoves.

"The seven cities, are seven small towns, all built of the

kind of houses that I have spoken of, and they stand all within four leagues together. They are all called the kingdom of Cibola, though each town has its particular name, none of them being called Cibola, but altogether they are called Cibola. In the town where I now am, there may be some two hundred houses, all compassed with walls, and I think with the rest of the houses that are not so walled, they may be altogether five hundred. There is another town near this, which is one of the seven, which is somewhat larger than this town, and another of the same bigness that this is of, and the other four are somewhat less."

From this letter of Coronado's we have besides extracted the following particulars.

The natives wore cotton mantles, and the Spaniards found in their houses cotton yarn, and raw cotton, both red and white.

They also obtained turquoise stones, emeralds, garnets, and crystals, but only in small quantities.

They speak of the abundance of maize found in the country, which they said the Indian women ground in a superior manner to any thing they had seen before, and that one would grind as much as four did in Mexico.

The natives had excellent salt, which they procured from a lake about a day's journey distant.

They observed here the animal known to our Indian traders as the Rocky mountain goat, (*Capra montana*, Harlan,) which they call a sheep from the fineness of its wool.

Coronado sent the viceroy a mantle, which, he says, was "excellent well made," and which he describes as if it had been embroidered with a needle; he adds, that such a thing had not been seen before in America, unless executed by the Spaniards.

They also describe the natives to possess large dogs, which were used for purposes of draught, and who would draw a load weighing fifty pounds.

In A. D. 1583, or forty-three years after Coronado's expedition, a Spaniard named Espejo, made an incursion in these countries with a military force. (*Hackluyt*, iii. 389, &c.) He confirms the preceding statements of Coronado and mentions expressly that he saw "houses built of lime and stone."

Espejo describes the natives, "as people much given to labour, and continually occupied," wearing mantles of cotton streaked with blue and white, and using towels, ornamented with tassels at the corners.

They lived in large and populous towns, in which were oratories or chapels containing idols. Their dwellings are

represented as being four stories high, well built, with stoves to warm them in the winter season.

The natives here used a club or stick so beset with sharp flints, that they were sufficient to cleave a man asunder. This weapon is the Mexican sword, which we have described at page 199, and which, I believe, was used no where else in America, but among the Tolteck nations.

It is impossible to guess how far north the Spaniards may have gone. On one occasion they say the latitude observed was $37\frac{1}{2}$, but they marched a considerable distance after this observation was made.

The only circumstance that tends to render this narrative suspicious, is the great indications of gold and silver which they frequently observed in the mountains; which, however, may perhaps be correct for aught that we know. But when we remember the credulous stories of the first settlers of Canada, New England, Virginia, &c. on this subject, we can readily admit, that ignorant and avaricious persons might be easily deceived themselves, and mislead others, without a wilful mendacity.

I know of no material circumstance, excepting the gold and turquoise stones in the foregoing relation, that is not apparently substantiated by the testimony of the monks quoted by Humboldt, and the description given of the *Casas Grandes*. The woollen garments as they are called, were recently observed on the coast; (see page 81,) where white Indians are also found. (See page 21.)

I think it therefore unreasonable, that these ancient accounts of the demi-civilization of Cibola, should be considered unworthy of credit; though it is not improbable that some particulars may be exaggerated. Whatever we may think of friar Mark, we cannot believe that Coronado made representations contrary to truth; when, though impeaching the veracity of the monk in certain matters, he describes a state of society existing there, evidently proving a demi-civilized country.

In this unexplored part of America, therefore, I am decidedly of opinion we must look for those ancient seats of the Tolteck nations, which between the years of the 7th and 12th centuries, they abandoned to seek an establishment in the land of Anahuac. Whether a part of the ancient stock is yet to be discovered there or not it is impossible to state; but when we remember, that this undescribed part of our country, is about 800 miles in length, and 700 miles in breadth, it is not unreasonable to believe, that a careful examination, when practicable, would even yet disclose to us matters con-

nected with the ancient history of this people, interesting in the highest degree.

At present, we know of but insignificant analogies, in the languages spoken on this coast to that of the Mexicans, and as far as I have learned, they seem confined to some few instances of words ending in *tl*, that have been observed at Nootka Sound. (*Cook's Voy. N. Hem.* ii. 335.)

At Nootka, however, we are told, (*Humboldt, Pol. Essay*, ii. 257,) that the natives reckon twenty days to their months, which was the Mexican computation; and this seems too arbitrary to have been original with these people, who are said also to have counted fourteen such months to their year, with an intricate system of intercalation whereby they adjusted their civil time with apparent solar motion.

I think, on the whole, this account of the people of Nootka, has been misunderstood by the Spaniards, who can hardly be supposed to have learned their language sufficiently well to have comprehended their communication on this subject. That they may have had months of twenty days, we do not deny, but that their year consisted of fourteen such months, is seemingly incredible; for if they indeed used intercalations to correct their time, it is impossible that they could overlook the grossness of a system, that gave but two hundred and eighty days to the year. If they counted eighteen such months to the year, it is really the Mexican computation, and this I presume was the case, but which was misunderstood by the Spanish botanist quoted by Humboldt.

From our preceding discourse, though it seems most reasonable to look for the ancient country of the Toltecks, Acolhuas, Mexicans, &c. in that part of America included between the Columbia and Gila rivers, and it seems certain that they arrived in Mexico through that hitherto unexplored country; yet is not impossible that these nations, or a part of them, may have in more remote times crossed the Rocky mountains from some part of the western states of our Union, where we now find various monuments, attesting the residence of some anciently demi-civilized people.

Though the Natchez, and other demi-civilized people of Louisiana, were fully able to construct such monuments, yet it is not so easy to believe, that they alone were concerned in their erection; as these works are spread over a very great extent of country, seemingly too great to have ever been under the exclusive occupancy of those people, whom the Spaniards and French found established in Louisiana, Georgia, &c.

The following statement, derived from the account of

Soto's expedition to Florida, seems at least in a slight degree, to argue some connexion between the natives of Louisiana and the Toltecks. When that invader was somewhere, as I conjecture, about the N. E. part of the province of Texas, he came to a district and town called *Tula*, (*Herrera*, v. 340,) where he had a very severe conflict with the natives, who attacked him shouting *Tula*.

Tula, in the history of the Toltecks was the capital of their ancient country, and in remembrance of it, they so named their capital city in Anahuac. Tula signifies *a place of reeds*, which epithet may be applied to innumerable localities; but whether the Tula of the province of Texas had this meaning or not we cannot say.* At any rate, we cannot consider it to have been the ancient Tula of the Toltecks, but it may have been named after it, as was the case with the city in Anahuac, by some nation or people directly or indirectly connected with that anciently demi-civilized people; and who carried this word with them wherever they made their settlements, as in Mexico, Yucatan, &c.

We must not forget to state, that there was a nation of Louisiana called by the French Chitimachas, who lived in the low lands between the Mississippi and the Atchafalaya rivers. They had been once a considerable people, though they were in a very ruinous condition at the time of the French settlement. Du Pratz on several occasions mentions them as a branch of the demi-civilized Natchez; and that these last considered them brethren.

The name Chitimachas, seems to be identical with the Chechimecas of the Spanish historians, and of whose emigration to Anahuac we have already given an account in page 177. The degree of civilization possessed by them, is very analogous to that we have described as pertaining to the Natchez and other Floridan nations.

As a few individuals of the Chitimachas are still living, it is to be hoped we may yet ascertain, whether their language bears any features of identity with the languages of Mexico. Nuttall (*Travels*, 241,) says, that Mr. Du Ponceau informed him, that the language of the Chitimachas appears to be radically distinct from that of other aborigines of the southern states.

* The French translation of Garcilazo's Conquest of Florida, &c. (*Vol. ii.* 176,) which says, "cette ville qui est située dans un pay plat, entre deux ruisseaux;" would give us reason to think, there must have been reeds in abundance in that neighbourhood.

CHAPTER VI.

OF THE NATIONS INHABITING GUATEMALA.

WE are now about to direct our investigation to a region whose singular antiquities and history, have forcibly impressed upon our minds the belief, that the most civilized and polished people of America, prior to the Spanish discovery, were there established. Our information, however, concerning this most interesting country is very imperfect, and is derived chiefly from detached portions or fragments of the Spanish writers, which we are fearful, all our synthetic skill will be unable to bring together with such coherence, as to convey a just idea of the social condition of the natives of Guatemala, in those times that preceded the voyage of Columbus.

A part of the obscurity that covers the ancient history of the demi-civilized nations of this kingdom, is to be attributed to the barbarous fanaticism of the Spanish conquerors, and to the apathy and ignorance of their more immediate descendants. But unwilling to do even them an injustice, we must at least for the present state, that there are several historians of the country, whose works may possibly contain much information on these subjects, but which all our exertions have failed to procure. It may therefore seem presumptuous in us to write upon these people, when we inform the reader, we have never seen the works of Torquemada, Sotomayor, Remesel, or Fuentes, and this feeling has made us defer to the very last article of this book, the present disquisition, when being compelled as it were to make the attempt, we have undertaken it with all the disadvantages above stated.

It is true, we have not been altogether discouraged in making the present essay, notwithstanding the defect of materials, as we have had access to some general histories of Guatemala, in which the above named authors are quoted both for statements and opinions; which being on the whole conformable with our own impressions, induce the hope, that we may have the substance of their views and researches, though without those minutiae of particulars which should constitute the basis of our reasoning, and by which alone we can be guided in our search after truth. It is a very different thing to have the original facts or traditions, instead of the deductions from them, often unwise and pre-

posterous; and of which we have so many instances in the Spanish American writers, that we rely unwillingly upon their inferential statements.

The few authors to whom we have had access, however, are good, and tolerably explicit; as will be seen in the ensuing pages where we shall quote them freely. The great disadvantage under which we labour, is, that not knowing what may have been proved by the writers we have not read, we are compelled to adopt a certain course to establish our views, that may to others better informed, appear both tedious and unnecessary. But having stated all our sources of embarrassment, we shall proceed without further apology.

To accomplish our undertaking in the best manner that our means afford, we shall in the first place, attempt to give a view of the different nations inhabiting Guatemala, with such sketches of their traditional history, as may justify the belief, that their demi-civilization either arose from some source common to them all, or that if of different origins, it had become similar throughout the kingdom, in consequence of the civil commotions of states dispersing their population into adjacent countries, from their mutual invasions of each other's territory, or from emigrations from one part of the kingdom to the other; all of which causes of confusion, we know did take place according to their traditional history.

As I think we shall be able by this method to prove an identity of system in their social condition, we shall then proceed in a regular manner, to exhibit the state of civilization peculiar to the people of Guatemala, by bringing under each proper head, whatever we have been able to collect concerning the different nations of the kingdom. In this manner we may, perhaps, with some plausibility, infer what was the more entire and perfect system, by which they regulated the political and religious forms of their social compact. But before we commence this investigation, some few prefatory statements are necessarily to be made.

In our ensuing discourse, we shall consider the kingdom of Guatemala as extending from the western frontiers of Soconusco, Chiapa, and Tabasco, to the isthmus of Darien. In this investigation we also include the province of Yucatan, which though politically attached to the kingdom of Mexico, yet geographically and morally considered, should pertain to Guatemala, as is evident from the inspection of the map, and from the aboriginal history of the country.

The kingdom of Guatemala, had never fallen under the dominion of the Mexican kings, (*Herrera*, iv. 188. *Juarros*, 200,) though we believe, they had established them-

selves in some places on the northern frontier of Chiapa, and partially in some small settlements in the interior of the country; yet their political influence cannot be said to have been felt in Guatemala. What effect the example of their institutions or their religion may have had in this kingdom, is more doubtful; as there were certainly many resemblances in these particulars to the social state of the Mexicans: but as we shall presently show that the Toltecas, so distinguished in the ancient history of Mexico, had also established an empire in Guatemala, we may explain any circumstances of general analogy by that undoubted fact.

Juarros, (*Hist. Guatemala*, 198,) enumerates twenty-six different languages to be spoken in Guatemala, by which we presume, he means tongues or dialects, together with such original languages as might be found in the kingdom; but he makes no particular remark on this subject. The reader, however, will perceive how confused and limited our information on this interesting country must be, when he is informed, that of these different people there is but one, whose history even in a very partial manner, can be separated from the common mass.

We shall now proceed in our disquisition upon the plan we have already laid down in the preceding page; commencing with the history of that people concerning whom we have the most direct and certain account, and then to describe the different provinces of the kingdom in regular succession, as far as we have been able to collect any important information.

Juarros, (*Hist. Guatemala*, 88, 161,) says, "the nation of the Quichés or Tultecas, extended their empire over the greatest portion of the present kingdom of Guatemala." Their traditional history is related by him, upon the authority of manuscripts in that country that had been written by early descendants of the conquerors, who intermarried with the daughters and sisters of the aboriginal chiefs and nobles.

It is an unfortunate circumstance that the traditions are not given in their own words; for the Spanish authors have disgraced the very commencement of the relation, with the following most absurd and unwarrantable statement. "It appears," says Juarros, "that the Tultecas were descended from the house of Israel, and were released by Moses from the captivity in which Pharaoh held them. Having passed the Red sea they resigned themselves to the practice of idolatry, and persisted therein in spite of the admonitions of Moses. But to avoid his reproofs, or from the fear of his inflicting some chastisement, they chose to separate from

him and his brethren, and to retire from that part of the country to a place which they called the *Seven Caverns*; that is, from the borders of the Red sea, to what now is a part of the kingdom of Mexico, where they founded the celebrated city of Tula."

In this senseless and extravagant paragraph, which in half a dozen lines, connects the Exodus from Egypt, before Christ 1491, with the settlement of the Toltecas in Anahuac, A. D. 607, a space of two thousand and ninety-eight years, is overwhelmed any traditional account the Toltecas may have really given of their history before they came to Mexico. We cannot but regret the folly that indulged itself in so ridiculous a conclusion, at the expense perhaps of invaluable tradition, and the sagacity of antiquarians in possession of their reason and understanding. But it is useless to express regret on this subject, unless some fortunate accident may have preserved these ancient records, in the lumber of some Spanish convent in Guatemala, they have most probably perished, and are for ever lost to the scientific world.

From these "Seven Caverns," the Quichés or Tultecas say, they marched into Mexico under the command of a king named Tanuh, who was their first monarch, and from whom were descended the kings of Tula and Quiché. It seems, they had resided some time in the kingdom of Mexico, and had multiplied greatly, when by the direction of an oracle, they left the Tolteck kingdom in Mexico and marched into Guatemala under the command of a chief or king called Nimaquiché, who was the fifth in descent from Tanuh. They were engaged many years in this emigratory march, and finally settled at a short distance from lake Atitlan, where they built a city which they called Quiché after the name of their leader. It is related on the authority of the same manuscripts, that Nimaquiché was accompanied by three brothers, who divided the country among them in the following manner: One had for his share, the province of the Queleenes and Chiapanecos; another possessed Tezulutlan or Verapaz; the third became chief of the Mams and Pocomanes; while Nimaquiché reigned over the Quichés, Kachiquels, and Zutugiles. The son and successor of Nimaquiché was named Aexopil, who was at the head of this nation when they settled in Quiché, and was the first monarch who reigned in their capital city of Utatlan. Aexopil having attained a very advanced age, divided his empire into three kingdoms; namely, the Quiché, the Kachiquel, and the Zutugil. The first of these he retained to himself, and gave the others to two of his sons. At this time, the empire of Aexopil embraced the

present district or provinces of Solola, Chimaltango, Sacatepeques, and part of those of Quezaltango and Totonicapan. (Juarros, *Hist. Guat.* 168.)

From the time of Nimaquiché to the arrival of Spaniards, fifteen monarchs had ruled over the Quiché nation at Utatlan, the last of whom fell in battle, A. D. 1524, by the hand of Pedro De Alvarado a chieftain already infamous in the Mexican conquest, and who now led an army of Spaniards and confederate Indians to the subjugation of Guatemala.

In the preceding tradition, we recognise the account given by the Mexicans, that they had proceeded from *seven caves*; and in Tenuch, one of the chieftians who led them to Mexico, we may discern the king Tanuh of the Toltecks or Quichés, who is described as conducting the march of the latter people to Anahuac. From these circumstances we might infer, that the Quichés were rather connected with the Mexicans than with the Toltecks, of whom we have discoursed in p. 175. But as there is every reason to believe, that though the Toltecks were superior in civilization to the Mexicans they were of the same descent, (*Clavig. Hist. Mex.* i. 144, note; *Humboldt, Research.* i. 81,) it is most probable, they all had the same traditional history in common, though it has not been recorded in the accounts we now have of the Toltecks. But however this may be, we learn from Juarros, that during the most flourishing period of Teltecan history, a part of their people under the name of Toltecas or Quichés, left that kingdom and emigrated to Guatemala. We may also reasonably conclude, when the dissolution of the Toltecan monarchy in Anahuac took place, that the Quichés received some of that people among them; for it is directly asserted by several Spanish writers, that many of that ancient nation removed to the country adjacent to lake Nicaragua.

The identity of the Quichés with nations connected with the Toltecks of Anahuac, is however evident from the declarations of the Mexicans and Tlascalans who assisted the Spaniards in the conquest of Guatemala; for according to Juarros, (*Hist. Guat.* 167,) "they declared themselves relations and friends, formed intermarriages with the Quichés, and gave them a copy of the instrument by which they had received honor and privileges from the emperor Charles the 5th, for services rendered to the Spaniards during the conquest of Mexico.

The people of Chiapa, to a greater or less degree, it is probable were of similar origin with the Quichés. Such at least is their tradition, which we think confirmed by the analogy existing between their ancient monuments. We prefer this

statement of their descent to that given by Remesal, (*Juarros, Guatemala*, 207,) who affirms they came from somewhere beyond lake Nicaragua, which is contrary to every analogy; for in important particulars they agree with the Toltecan nations, who certainly came from the north. If there be any weight in Remesal's observation, which we have only learned, however, at second hand, I should presume it can only refer to some partial removal of their population from one place to another in the same country.

Clavigero (*Hist. Mexico*, i. 141,) relates, that the Chiapense reported, they had come to their country from the north, and that when they arrived at Soconusco a separation of their people took place, some going to inhabit the country of Nicaragua, while another portion remained in Chiapa.

The Quiché traditions state, that both the Quelenes and Chiapense, are descendants of those persons who followed a brother of king Nimaquiché from Tula in Anahuac.

The Chiapense appear to have held some traditions very similar to the one we have related of *Xelhua*, among the Cholulans, (page 234,) and which is thus summed up by Nunez de la Vega. (*Juarros Guat.* 208.) The Chiapense relate, that they had been conducted to their country by twenty chiefs, the principal one of whom was called Votan, who, according to their tradition, saw the great wall which men attempted to build up to the sky; and that at this place, to every people a different language was given. But as this relation is the substance of De la Vega's inference from their tradition, we will not venture to comment on it, further than to remark its apparent conformity with the tradition of the Cholulans already quoted, and which Humboldt (*Res.* i. 320,) also justifies by his quotation from De la Vega.

The next province in order is that of Yucatan, which, according to Juarros, (*Hist. Guat.* 287,) was known to the aborigines by the name of Maya, the appellation of the most considerable nation inhabiting the peninsula. Whether their language be radically distinct from that spoken by the Quichés we have no means of ascertaining; but Juarros has enumerated it as a distinct tongue in the catalogue of languages spoken in Guatemala. I do not however place much reliance upon his classification, unless the languages he mentions are to be considered as dialects of some one or more original languages spoken in the kingdom; on this point, however, he has said nothing to justify any supposition whatever. But though the language of the Mayas may be original or not, I apprehend their civilization, as manifested by their architecture, science, and religion, indicates an origin from sources

common to them, the Quichés and other demi-civilized people of Guatemala.

All that we have been able to learn of the traditional history of this province, may be seen in Herrera, (*Hist. Amer.* iv. 161, &c.) who says, some of the natives informed the first Spaniards who invaded their country, that "they had been told by their forefathers that their country had been inhabited by people that came from the eastward, whom God had delivered from others, opening them a way through the sea."

Concerning this people we have no other particulars stated; or whether they constituted the basis of the population of the country. It is most probable, however, that the people of Yucatan came from the westward; for Herrera immediately proceeds with the following statement: "At Chicheniza old men said, that formerly three brothers reigned there, who came thither from the westward, gathered a great multitude, and ruled some years peaceably and justly, and that they built large and fine structures." After a time, these brothers became odious from their vices and tyranny to the people, who killed them and then dispersed themselves, abandoning all the structures they had erected, &c.

Herrera continues to relate, that "those who inhabited Chicheniza are called Yzaes, among whom a great lord called Cuculcan is said to have reigned, and all agree that he came from the westward; but there is a difference between them whether he came before or after, or with the Yzaes. But the name of the structure of Chicheniza, and the events of that country after the death of the lords, shew that Cuculcan governed together with them. He was a man of a good disposition, not known to have had wife or children, a notable republican, (statesman) and therefore looked upon as a god, he having contrived to build another city in which business might be managed. To this purpose they pitched upon a spot eight leagues from the place where Merida now stands, and fifteen from the sea, where they made an enclosure of about half a quarter of a league, being a wall of dry stone, with only two gates. They built temples, calling the greatest of them Cuculcan. Near the enclosure were the houses of the prime men, among whom Cuculcan divided the land, appointing each of them towns."

"This city was called Mayapan, (*the standard of Maya*), the Maya being the language of the country. Cuculcan governed the province in peace and quietness and with great justness for some years, when having provided for his departure, and recommended to them the good form of government which had been established, he returned to Mexico the same

way he came, making some stay at Chanpoton, (N. lat. 19° 30',) where as a memorial of his journey, he erected a structure in the sea, which is to be seen at this day."

The lords of Yucatan, thinking it would be better to vest the civil government in the hands of one person, conferred the dignity on the family of the Cocomes, who appear to have been princes of considerable power: for they are said to have possessed "twenty-two good towns." They enlarged the city, which seems to have been under the regulation of a good police; for taxes or tributes were raised in kind among the people, and provision was made for the support of the maimed, aged, blind, &c.

"They had a high priest for the service of their gods, who was succeeded by his sons. He had the direction of religious affairs, gave advice to the lords, answered questions proposed to him, provided priests for all the towns, whose business it was to teach their sciences, and compose such books as they had."

"Whilst the Cocomes lived in this regular manner, there came from the southward great numbers of people, looked upon for certain to have been of the province of Chiapa, who travelled forty years about the deserts of Yucatan, and at length arrived at the mountains that are almost opposite to the city of Mayapan, where they settled and raised good structures. The people of Mayapan some years after, liking their way of living, sent to invite them to build houses for their lords in their city. The Tutuxius, (so these strangers were called,) accepted their courtesy, came into the city and built their houses, and their people spread about the country, submitting themselves to the laws and customs of Mayapan." &c.

While they lived in this quiet and peaceable manner, the lord of Mayapan of the race of Cocomes, with the assistance of forces procured from the Mexicans at Tabasco and Xicalango, began to oppress and tyrannize over his people. His successor still continuing the same course, and constantly introducing Mexican soldiers into the country, at last became so oppressive, that the people with the assistance of the Tutuxius, rose on their governor, assaulted his house, and slew him and all his sons, excepting one who happened to be absent. They then abandoned the city of Mayapan, an event which took place about five hundred years after its foundation, and about seventy years before the arrival of the Spaniards.

Herrera says, "each of the lords who left Mayapan, endeavoured to carry home as many of that sort of books they

then had as he could, for the instruction of their people, and there they built temples, which was the occasion that so many structures were found in the province."

It is not deemed necessary to continue the local history of this country to a later period. Herrera mentions the rise of the Tutuxius to great importance, the partial revival of the Cocomes, &c., but these matters do not concern our present investigation.

In the preceding historical traditions, we perceive that the great bulk of the population of Yucatan, came from the westward, which as a general expression, may mean either Mexico, Chiapa, or Guatemala proper. As to the earliest tradition, which ascribes a part of the population to strangers from the east, I should presume, it either applies to some accidental arrival of persons from some of the West India islands, or else the story arose from some perverted tradition which the Spaniards have not fairly understood. We shall, however, presently take notice of this tradition in connexion with certain facts that may, in the opinion of some persons, make it of more importance than we can at present admit.

If we can allow of any accuracy in the chronological events of the traditions above related, it would appear that the building of the city of Mayapan, and the foundation of the government of the Cocomes, took place about 570 years before the arrival of the Spaniards in Yucatan. (A. D. 1527.) This will bring the time to about 70 years before the epoch, when the Tolteck government in Mexico, became dissolved from the causes we have enumerated in page 176; and it is not improbable, that the remainder of that nation, emigrating towards the east, reached Chiapa, and spread themselves in Yucatan, Honduras, Nicaragua, &c. The history of Cuculcan expressly declares, that a connexion existed between some of the ancient demi-civilized people of Anahuac, and the people of his government in Yucatan, but it is too obscure to venture an opinion as to what particular people might be meant in the tradition.

Concerning the origin of the natives of Honduras, the Spanish writers accessible to my research, mention no tradition. We may, however, from the brief account we possess of their institutions and religion, as well as from their juxtaposition to the Quichés and Nicaraguans, pretty safely infer them to have been either of similar descent, or at least, that their civilization proceeded from the same common source.

Those particulars of their institutions, religion, &c. that may be deemed worthy of notice, we shall mention incidentally, in the general history of the kingdom of Guatemala.

The people of the province of Nicaragua, (*Herrera*, iii. 300, 340,) said, "they were descended from the Mexicans, and their language and habits were much the same with those people."

This tradition we consider substantially correct, but not in all particulars. The Mexicans here spoken of, are not to be considered as the Aztecks or Mexicans proper, but as persons from the kingdom of Mexico, who in all probability were Toltecks or a kindred people. The tradition of the Chiapenese, considered them the same people with themselves.

Of the identity of the Nicaraguans with the Toltecks and Quichés, we shall presently give plausible evidence, when we discourse in a general manner concerning the institutions of the Guatemalan nations.

To make our account of the different nations of Guatemala as complete as our means afford, we must observe, that the Mexicans, properly so called, whose kingdom adjoined Guatemala, had not only made some partial settlements in this country along the frontiers, but had also intruded themselves into the interior provinces, where they lived with greater or less communication with the more ancient or original nations of the country. We have already mentioned, that the monarch of the Cocomes in Yucatan, had introduced Mexican soldiers into that peninsula to enable him to oppress his own subjects. After the revolution that ensued, as we have already mentioned, the Mexicans were permitted by the insurgent chiefs and Tutuxius to remain in the province. (*Herrera*, iv. 166.) They settled in the district of Canul, a little to the westward of Cape Catoche, where they continued until the arrival of the Spaniards.

Juarros, (*Hist. Guat.* 224,) says, that the Pipiles, who were found on the coasts of the Pacific ocean in the provinces of Zonzonate, St. Salvador, and St. Miguel, were also of Mexican origin; but the account he has given of them seems so improbable, that we rather consider them to have been like other people of Guatemala, descendants of the Toltecks or other kindred tribes. The relation of Juarros, however, is to be found in the note to this page,* by which

* "Autzol, the eighth king of Mexico, having been repulsed in his attempts to subdue the powerful nations of the Quichés, Kachiquels, Mams, Tzendals, Quelenes, and Sapotecas by force, endeavoured to accomplish his object by stratagem. The commencement of his plan was to send a great number of Indians under the direction of a chief and four subordinate officers, who were directed to introduce themselves by degrees into the country under the disguise of merchants; and settle where they could along the coast of the Pacific ocean. By this contrivance, he expected to have a

the reader can judge of the probability of our conjecture concerning their history.

Of any other people of Guatemala than those already mentioned, we have no accounts, most probably they were but barbarian in their manners and institutions; though from living more or less connected with the demi-civilized nations of the country, they may have been influenced to a certain degree, to imitate them in the more obvious particulars of comfortable living. Such, perhaps, were the kings of Acla and Comagre on the Isthmus of Darien, whose social condition made a certain impression on the minds of the Spaniards, who first visited Tierra Firma. The few particulars we possess concerning these chieftains will be annexed to the end of this chapter.

Having now completed our sketch of the more celebrated nations inhabiting Guatemala, with such apparent probabilities of their having been constituted and governed upon principles and practices common to the whole, we shall now proceed to exhibit under different heads, all that seems worthy of record concerning their social condition, as far as our limited means have afforded the opportunity of compilation.

Of the Forms of Government, Laws, &c., of the People of Guatemala.

Though we have every reason to believe, that the general form of government among the natives of Guatemala was essentially monarchical, yet we must take notice of two anomalies in the general system, but of which we are unable to communicate any particular information.

Clavigero (*Hist. Mexico*, i. 141,) says, "the Chiapenese were not governed by kings, but by two military chiefs elected by the priests."

In the district of Acalan in the province of Honduras, Herrera says, (*Hist. Amer.* iii. 360,) it was the custom "to choose the wealthiest merchant for their lord, and such was Apoxpalan, who drove a great trade, &c."

Excepting the above instances, I have met with no other

strong party ready to assist him, whenever he found it convenient to make an irruption into the country. His death, however, put an end to his designs almost at their very beginning. The Indians who had thus obtained a footing were Mexicans of the very lowest caste, speaking a corrupt dialect of the Mexican with a childish pronunciation: this circumstance gave rise to their name of Pipiles, a word in the Mexican language signifying children. In a short time, these Pipiles multiplied immensely, and spread over the provinces of Zonzonate, St. Salvador, and St. Miguel; a fact proved by the great number of villages in these districts to which the Pipil language is vernacular."

relation but such as induce a belief, that the country was divided among a number of petty chieftains, each king over his own town or village, and owing fealty and submission to a lord paramount, whom we may call the monarch or king of the country. But how these matters were regulated we know not, unless it may be inferred from the history of the Quichés as related by Juarros.

The government of the Quichés, according to Juarros, (*Hist. Guat.* 187.) was monarchical and hereditary, after a manner recognized among many aboriginal people of America. Thus, if the eldest son of the reigning king succeeded his father in the throne, the second son was called the *elect*, as being the next heir to his brother. The son of the eldest son, received the title of *captain senior*, and the son of the second son, was styled *captain junior*, according to the Spanish translation of the Indian words. When the king died, the *elect* (second son) succeeded him, and the *captain senior*, became the *elect*, and the "captain junior," became "captain senior." But if any one of these four personages was found incapable of governing, he remained in his individual rank during life, and the next nearest relation was raised to the superior dignity.

The supreme council of the monarch of Quiché was composed of twenty-four grandees, with whom the king deliberated on all political and military affairs. These counsellors were invested with great dignities and privileges, but were severely punished if they committed any crime. The administration of justice and collection of the public revenues were under their charge.

Whenever the king went abroad, he was carried in his chair of state on the shoulders of his counsellors.

The monarch or king of the Quichés, was liable to be tried for his political conduct, and if convicted of extreme cruelty and tyranny was deposed by the *ahaguães*,* who for this purpose assembled a council with great secrecy; the next in succession according to law, was placed on the throne, and his ejected predecessor punished by confiscation of property and death.

To the offices of lieutenants and counsellors, and even to door-keepers of the council chamber, none but those of noble birth were admitted; and there was no instance of any person being appointed to any public office, who was not selected from the nobility. Hence to keep the purity of their

* Juarros does not translate this word, nor does he inform us who they were that bore the title; most probably, however, the "counsellors" are meant.

lineage unsullied, it was decreed by law, that if any cacique or noble should marry a woman not of noble family, he should be degraded to the caste of plebeian, and his estates were sequestered to the king, leaving him only a sufficient maintenance as a plebeian.

The Quiché kings lived in great state and dignity at their capital city of Utatlan, (near Santa Cruz, in Solola.) We shall not describe that city, as we have selected Del Rio's description of a deserted city near Palenque in Chiapa, to illustrate the subject of the architecture of the nations inhabiting Guatemala, and which will be presently laid before the reader. But to convey a correct idea of the court and palace of the Quiché kings, we shall extract from Juarros, (*Hist. Guat.* 87,) that part of his description of Utatlan that relates to this particular subject.

"The palace of the kings of Quiché, in the opinion of Torquemada, could compete in opulence with that of Montezuma in Mexico, or that of the Incas at Cuzco in Peru. The front of this building extended from east to west 376 geometrical paces, and in depth 728: it was constructed of hewn stone of different colours, its form was elegant and altogether most magnificent. There were six principal divisions; the first contained lodgings for a numerous troop of lancers, archers, and other well disciplined troops, constituting the royal body guard. The second was destined to the accommodation of the princes and relations of the king, who dwelt in it and were served with regal splendor as long as they remained unmarried. The third, was appropriated to the use of the king, and contained distinct suites of apartments for the mornings, evenings, and nights. In one of the saloons, stood the throne, under four canopies of plumage: the ascent to it was by several steps. In this first part of the palace were the treasury, the tribunals of the judges, the armory, the gardens, aviaries, and menageries, with all the requisite offices appending to each department. The fourth and fifth divisions, were occupied by the queens and royal concubines; they were necessarily of great extent, from the immense number of apartments requisite to the accommodation of so many females, who were all maintained in a style of sumptuous magnificence. Contiguous to this division, was the sixth and last; this was the residence of the king's daughters, and other females of the blood royal, where they were educated and attended in a manner suitable to their rank."

Connected with this establishment, were gardens, baths, &c., and "places for breeding geese, that were kept for the

sole purpose of furnishing feathers, with which hangings, coverings, and other similar ornamental articles were made."

As it has been generally a habit, to consider the seemingly magnificent descriptions of the early writers on American aboriginal institutions as romantic exaggerations, we apprehend it is possible, that such a sentiment may arise at the present moment, in the bosom of the reader after perusing the above description. Though we will not contend that there is not more or less exaggeration in the relation extracted from Juarros, we must request the reader to suspend his opinion on the subject, until we have been able in the ensuing pages, to introduce other matters pertaining to the civilization of the natives of Guatemala, which will impart great appearance of verisimilitude to the preceding description.

We may judge of the general character of the laws by which the Quiché monarchy was governed, from the following extracts taken from Juarros, (*Hist. Guat.* 191,) who has partially exhibited some of the moral principles of their legal system.

Whoever was guilty of crimes against the king, or against the state, or was convicted of homicide, was punished by death, the sequestration of his effects, and slavery of his relations.

The stealing of things sacred, the profanation of the temples, and contumacy to the priests or ministers of the idols, subjected the offender to capital punishment, and all his family were declared infamous.

Ordinary robberies were punished by making the culprit pay the value of the things stolen, and a fine in addition. For the second offence, the fine was doubled; and for the third, they were punished with death, unless some nobleman would redeem them; but if they transgressed a fourth time, they were inevitably put to death by throwing them from a rock.

Incendiaries were deemed enemies of their country, because it was said that fire has no bounds, and by setting fire to one house a whole town might be destroyed. Death therefore was the punishment inflicted upon the perpetrator, and his family were banished from the kingdom.

Rape was punished by death. Adultery in a queen, was punished by strangling the parties if the man was of noble blood; but if he was a commoner, they were both thrown from off a very high rock.

Adultery among ordinary individuals, appears to have been punished pretty much according to the discretion of

the injured husband and his friends; sometimes they inflicted death, and at other times a very severe cudgelling on the offending party.

Juarros informs us, that when a criminal was brought before the judge, if he confessed the crime with which he was charged, he immediately underwent the punishment awarded by the laws: but if he denied the charge he was tortured, by being stripped naked, suspended by the thumbs, and in that situation severely flogged, and exposed to the smoke arising from burning cayenne peppers.

From these extracts we may perceive, that the Quiché laws were severe in their penalties. On the whole, however, the moral reasoning was just and appropriate to a demi-civilized people, who can be only restrained by laws which appear cruel to persons of European origin. Their mode of examining criminals, reminds us of the similar practice of "father's land," where with all their boasted refinements and the influence of christianity besides, like these poor heathens, they attempted to extort the confession of guilt when direct proof was wanting.

With the Quichés, I presume, few or no cases were brought before the judge, that were of that doubtful character which the experience of civilized life, has ascertained to be so dangerous to individuals upon our ideas of presumptive evidence, and hence, much less injustice was done in this procedure of the Quiché courts, than might be at first apprehended.

Of matters relating to the Wars of the people of Guatemala.

We have every reason to infer, that the demi-civilized people of Guatemala arrayed their troops in good order for fighting, and that there existed a considerable degree of discipline and subordination among their soldiers. (*Bernal Dias*, 328, 352.) *Herrera* (*Hist. Amer.* iv. 16,) says, that in Yucatan the Indian armies were drawn up with two wings and a centre, where the lord or general and the high priest were posted.

Though their musical instruments were also used in the ceremonies of their religion, and on convivial occasions, yet they more properly belong to their military institutions. They are thus enumerated, (*Herrera*, iv. 170,) "they have small kettle drums, and a large one that has a hoarse sound, long slender trumpets made of hollow sticks and at the end of them long crooked gourds, whistles made of deer's bones, large cornets, pipes made of canes, and another instrument of melancholy sound, made of the whole shell of a tortoise, all the flesh being taken out."

The weapons employed by the Quichés appear to have been very similar to those used by the Mexicans, as we may infer from the incidental notice of such matters by Juarros and other writers.

They used the wooden sword or club serrated with sharp flints, lances, arrows and slings. Bernal Dias (*Conq. of Mex.* 360, 368,) says, their archers were uncommonly good, and that their slingers annoyed the Spaniards greatly.

Juarros (page 232,) and Herrera (*Hist. Amer.* iii. 336, 337,) state, that the Indians near the city of old Guatemala, poisoned their weapons on a certain occasion, but I presume this charge to be incorrect, as Bernal Dias does not make mention of the fact, which that bragging Spaniard would hardly have overlooked.

They used targets made of wood, or of the hide of the tapir, and sometimes for this purpose, they employed the whole shell of the large sea turtle found on their coasts.

They also used as defensive armour, very thick cotton dresses, which Herrera says, (*Hist. Amer.* iii. 337,) "were so heavy that the wearers could not run away, nor rise when fallen, being like sacks, with sleeves made of cotton hard twisted three fingers thick."

Grijalva, on the coast of Tabasco, (*Herrera, Hist.* ii. 127,) was presented by an Indian chief with an armour made of wood, covered with plates of gold, a head piece of the same materials, &c. But though we mention the fact in this place, I rather think this armour was of Mexican manufacture, as I have met with nothing similar among the Guatemalans.

Fortifications, or military defensive works, were erected in considerable numbers throughout Guatemala, as may be seen in every history of that kingdom. Without taking notice of them according to their various localities, we shall alone extract from Juarros, (*Hist. Guat.* 462,) the description of one of the most celebrated fortresses of the country, which was situated to the east of Gueguetenango, near the river Socoleo, from which it derives its name.

"The approach as usual to such places, was by only one entrance, and that so narrow as scarcely to permit a horseman to pass it. From the entrance there ran on the right hand a parapet, raised on the berm of the fosse, extending along nearly the whole of that side; several vestiges of the counterscarp and curtain of the walls still remain, besides parts of other works, the use of which cannot now be easily discovered. In a court yard there stood some large columns, upon the capitals of which were placed quantities of pine wood, that being set on fire gave light at night to the sur-

rounding neighbourhood. The citadel or lofty cavalier of this great fortification was in the form of a square graduated pyramid, rising twelve or fourteen yards from the base to the platform on the top, which was sufficient to admit of ten soldiers standing on each side; the next step would accommodate a greater number, and the dimensions proportionably increased to the lowest or twenty-eighth step. The steps were intersected in unequal portions by parapets and curtains, rendering the ascent to the top so extremely difficult, that Fuentes says, he attempted several times to reach the platform, but was unable to perform the task until his Indian interpreter acted as his guide and conducted him to the summit. The ruins of several buildings were then in existence; they appeared to have been intended as quarters for the soldiers, were extremely well arranged, and distributed with due regard to proportion; between each three or four of these buildings there was a square court yard, paved with slabs, made of stiff clay, lime and sand. Every part of the fortress was constructed of hewn stone in pieces of great size; one of which being displaced measured three yards in length by one in breadth," &c.

Of the state of Society, Agriculture, Arts, &c. of the people of Guatemala.

It would seem from the Spanish writers, that the natives of Guatemala lived for the most part upon maize and other vegetable substances; a circumstance easily explained by the fact, that they domesticated no animals for purposes of food,* and being employed either in the cultivation of their grounds, in war, or other national services, they could only occasionally procure animal food by hunting or fishing. Juarros does not enumerate the plants or roots cultivated by the Quichés. Herrera (*Hist. Amer.* iv. 132, &c.) says, that in Honduras the natives cultivated maize, sweet potatoes, beans, peppers, (capsicum) gourds or pumpkins. The yucca or mandioc root is mentioned by him incidentally, but I have met with no account of the cassava bread having been used by them prior to the Spanish conquest.

Juarros remarks the Quichés were intemperate in their habits, and that they made ten different kinds of drink from maize. In Yucatan, Herrera (*Hist. Amer.* iv. 134, 170,)

* Bernal Dias, 415, says, he had observed that partridges were frequently domesticated among the Indians of Guatemala, but whether for food or as pets, he does not say. I presume the latter, for if they had reared animals for eating, they might have procured them of much larger size and equally manageable.

relates, that the natives intoxicated themselves with a liquor made of honey and water; and in Honduras they accomplished that purpose by infusions of certain roots and fruits in water, which were then submitted to fermentation.

Though Juarros does not mention the use of tobacco among the Quichés, yet we presume it was used by them in smoking; for Herrera and other writers takes notice of that practice in various other parts of the kingdom.

At Darien, this plant was smoked after a fashion we have not observed elsewhere. An attendant having lighted a very large cigar, put the burning end into his mouth and blew the smoke through the cigar into the mouths of all the company in regular succession. It is doubtful, however, whether this people were any ways connected with the demi-civilized portion of Guatemala.

Among the Quichés, when a man wished to marry, (a commoner I presume,) he was obliged to serve the parents of his intended wife for a certain period of time, and also to make them stipulated presents. If they should afterwards reject his suit, they were compelled to serve him an equal number of days, and restore the presents they had received.

Juarros seems to say, that the Quiché mothers were very careful of the chastity of their unmarried daughters; but if this really was the case with them, which we are inclined to doubt, it was not the general custom of the country. In Nicaragua, Herrera, iii. 298, says, the women were generally "naughty before marriage, and good after." Concubinage was permitted throughout Guatemala, but in Nicaragua at least, a man could have but one woman as his "lawful wife," and he who committed bigamy, was formally banished; an instance of keeping "the promise to the ear, and breaking it the sense," by no means extraordinary, even among ourselves or European nations.

There was nothing peculiar in the celebration of their nuptials that deserves notice, except the fact, that the parties were obliged previously to confess their sins in private to a priest, which practice appears from various passages in Herrera, to have been common among the nations of Guatemala on various important occasions. A not unwise law of the Nicaraguans, (*Herrera*, iii. 300,) allowed the priests who heard confessions to marry, a privilege not extended to the other ministers of their idolatrous worship.

Divorces constantly took place among these different nations, and as far as I have been able to discover, without any reference to the constituted authorities of the kingdom.

In the education of children the Quichés appear to have

excelled all other demi-civilized people of America, if we can rely upon the account of Torquemada, (*Juarros*, 195,) who says, "they had schools in all their principal towns both for boys and girls, who were under the superintendence of elderly experienced persons." *Juarros* (*Hist. Guat.* 87,) when describing the city of Utatlan, relates, "that the most superb of all the public edifices, was a seminary where between five and six thousand children were educated." We cannot but suspect these numbers to be greatly exaggerated, yet if the fact be true, that they had public schools, "supported by the royal treasury," it must establish the claim of the Quichés to more than an ordinary degree of demi-civilization.

I consider the relation, on the whole, plausible, as we shall be able to shew with some certainty, that the nations of Guatemala had improved their hieroglyphic system into one seemingly analogous to the character-writing of the Chinese; and hence an evident reason would be seen why pains should be taken to instruct their children in this artificial system. We must, however, defer speaking on this subject, until a more suitable occasion is offered in our ensuing investigations.

The Quiché nobility dressed themselves in cotton garments, dyed or stained with different colours. The common people, who were prohibited the use of cotton clothing, made use of grass and fibrous barks, which they spun and wove into pieces of the necessary size and shape. These last also used for clothing a certain kind of bark, which on being simply soaked in water for several days and then well beaten, resembled shammy leather of a brown colour.

The dress of the nobles, for the most part, consisted of a cotton shirt with sleeves, which were looped above the elbow with a blue or red band. They also wore a kind of half drawers, and over them another pair, which *Juarros* calls breeches, which reached to the knees, where they were ornamented with a species of embroidery, (fringes?) Their legs were bare, and the feet were protected by sandals fastened over the instep and heel by thongs of leather. The hair was worn long, and tressed behind with a cord of the same colour as that used upon the sleeves, and terminating in a tassel if the wearer was a man of distinction. The waist was girded by a piece of coloured cloth. Over the shoulders was thrown a white mantle, ornamented with the figures of birds, lions, (the cougar) and other decorations of cords and fringes.

The dress of the poorer classes was suited to the nature

of the climate. Some of them wore a shirt, which was drawn between the legs and fastened to a piece of cloth tied round the middle; and on proper occasions they no doubt used a coarse mantle. In the warmer districts of the country, they only used the breech-cloth, being otherwise entirely naked.

It appears from Juarros, that the better class of females among the Quichés, "wore a species of petticoat, that descends from the middle of the body to the ankles, and a robe over the shoulders reaching to the knees, which was worked with thread of different colours."

In Yucatan, the female natives "wore a garment like a sack, open on both sides up to their hips;" which we may presume was, with certain variations of no importance, the general fashion of the poorer class of females throughout Guatemala.

The Quichés pierced their ears and lower lips, through which they passed various ornaments of gold, silver, &c. The hair of the head was permitted to grow long, but they wore it queued up or tied into several tresses.

The Nicaraguans shaved the fore part of their heads, and those eminent in war removed all their hair but that which grew on the crown of the head, which was no doubt dressed in various fashions.

The natives of Yucatan, (*Herrera*, iv. 169,) flattened their "heads and foreheads" by artificial compression; and it would seem, that the women at least, used to "saw their teeth," and puncture their bodies.

We now proceed to describe as well as we are able, the various arts and manufactures of the people of Guatemala; but concerning which we cannot but regret, our information is but too often derived from the accidental statements of the Spanish writers, and not from any particular description of them.

We have already stated in our account of the dress of these people, that they spun and wove cotton and the fibrous barks of certain plants into suitable garments. We are ignorant by what methods they accomplished these manufactures, but presume it was by means of those contrivances that were used by the Mexicans. At any rate, they exercised these arts with great dexterity, for *Herrera*, (*Hist. Amer.* iv. 143,) says, the women among the Nicaraguans "spin as fine as a hair."

We have already mentioned in our account of the palace of Utatlan, that the Quichés from the feathers of birds, made "hangings, coverings, and other similar ornamental articles."

They undoubtedly understood the art of working the more common metals, such as copper, gold, silver, &c. though Juarros has strangely said they did not know the use of metal tools, a fact which he himself establishes, by describing many of their edifices to be constructed of "hewn stone."

Columbus when at Cape Honduras (long. 86° W.) was visited by a trading canoe of the Indians, (*Herrera*, i. 260,) and says, among other articles of merchandise that constituted their cargo, were "small hatchets made of copper to hew wood, small bells and plates, crucibles to melt copper," &c.

Cabrera, (*Del Rio's Description of Ruins near Palenque*, 53, 107,) takes notice of "brass medals," (I presume copper,) which have been found in various parts of Guatemala in considerable numbers. From his description and the plate annexed to the memoir, they appear to have been about four or five inches in diameter. He does not inform us whether these medals were casts, or simple plates of copper, upon which emblematical or ornamental figures have been engraved or cut, but we presume they were of the latter species. I consider them to have been ornaments that were worn on the persons of great men. They are engraved on both sides, according to the description he has given of one at his 54th page.

Vessels of silver, according to the same authority, have been found in a cavern in the province of Chiapa, (*Del Rio*, 107,) one of which on being brought to a priest, was so much like "a silver chalice," that it was afterwards used in the service of the altar. Cabrera thinks this circumstance supports the early opinion of the Spaniards that St. Thomas had preached the gospel in America!

Juarros mentions incidentally, stars-shaped ornaments of gold and silver that were worn by the Quiché nobility; and *Herrera* (*Hist. Amer.* iii. 297,) says, the goldsmiths among the Nicaraguans, "wrought and cast gold extraordinary curiously."

They also made jars, and other vessels of clay, and stone, for economical and ornamental purposes. Of these, however, we can give little account. Two ornamented vases of granite found on the coast of Honduras, have been described in the *Archæologia*, v. 318, and a plate of them with the above reference may be seen in Humboldt, *Res.* i. 90.

Idols made of stone or clay, are frequently described by the early writers of Guatemala, but we have no account of them whereby we might judge of their proficiency in the statuary art. As idolatrous objects, we shall take notice of them in an ensuing page.

Among other indications of an advanced state of demi-civilization, we observe in the history of Herrera, that the people of Guatemala carried on a considerable trade with one another. Their traffic was by barter or exchange of commodities; but it appears also from Herrera, (*Hist. Amer.* iii. 299, 340,) that they generally recognized, like the Mexicans, the nuts of the cacao as a kind of money, or intermediate article of barter.

The natives of Yucatan, traded to a considerable extent with those of Honduras, going thither "by sea in canoes carrying cloth, feather work, and other things, in exchange for which they took home cacao." (*Herrera*, i. 259. iv. 135.)

Apoxpalan, a merchant of Acalan in Honduras, (*Herrera*, iii. 360,) "drove a great trade in cotton, cacao, slaves, salt, gold, red snails, which they wore as ornaments, rosin, perfumes for their temples, hearts of pine trees to light them, colours and dyes to paint themselves in time of war and on festivals, besides other commodities; and accordingly he had factors in several towns where fairs were kept."

Herrera says this Apoxpalan was lord of Acalan, "it being the custom of this province to choose the wealthiest merchant of the place for their ruler."

In Nicaragua, (*Herrera*, iii. 340,) the natives held regular markets, and sold their goods for cacao instead of money.

I presume, that houses of accommodation like the oriental caravanseras, were erected at certain places in Guatemala, for the accommodation of merchants. Bernal Dias, (*Conq. of Mexico*, 412,) who marched with Cortez on an expedition into this country, observes on one occasion, "we passed on our road some large buildings, where the travelling merchants of the Indians are used to stop."

We have already called the reader's attention to the fact, that we have less information concerning the aboriginal condition of Guatemala, than perhaps of any other demi-civilized part of America, to which our meagre account of these people is abundant testimony. But as we have yet other matters to state which must raise the ancient people of this kingdom, to a rank among the most eminent nations of this continent as far as civilization is concerned, we must endeavour to impress on the minds of those persons curious in our disquisitions, the inevitable conclusion, that nations who had made the proficiency in the arts of architecture and design, which we shall immediately describe, must have equally excelled in all those more ordinary particulars of demi-civilization, which from our want of information, or the careless-

ness of the Spanish conquerors and early writers, we have not been able to describe better than in our preceding pages.

These observations, which anticipate our subject in part, we have been induced to make at the present time, as we shall not be able hereafter to resume the consideration of these particular matters.

Of the Architectural Monuments of Guatemala.

We shall now proceed to describe some of those architectural monuments of the ancient people of Guatemala, which evince the long settlement of a powerful, ingenious, and civilized people in that country; who probably wasted by internal wars during a succession of ages, became a comparatively easy prey to an army of barbarous Spaniards and Indians, who ravaged and desolated this interesting region, destroying every thing whose character was not as indestructible as the very rocks themselves.

Of the many ancient monuments of Guatemala, we have no account so complete as that which Del Rio, A. D. 1787, communicated to the king of Spain, concerning the ruins of an ancient city near Palenque in the province of Chiapa. From this memoir, hardly known in the United States, we shall now make copious extracts.

"From Palenque," (*Del. Rio. p. 3.*) "the last town northward in the province of Ciudad Real de Chiapa, taking a S. W. direction and ascending a ridge of high land that divides the kingdom of Guatemala from Yucatan or Campeachy, at the distance of two leagues is the little river Micol, whose waters flowing in a westerly direction unite with the great river Tulija. Having passed the Micol, the ascent begins, and at half a league from thence, the traveller crosses a little stream called Otolum, discharging its waters into the before mentioned current. From this point, heaps of ruins are discovered, which render the road very difficult for another half league, when you gain the height whereon the stone houses are situated, being fourteen in number, some more dilapidated than others, but still having many of their apartments perfectly discernible.

"A rectangular area three hundred yards* in breadth, by four hundred and fifty in length, presents a plain at the base of the highest mountain forming the ridge, and in the centre is situated the largest of these structures which has been as

* I presume the word *yard*, to be a translation of the Spanish *vara*, which is about thirty-three inches in length.

yet discovered.* It stands on a mound twenty yards high, and is surrounded by the other edifices, namely, five to the northward, four to the south, one to the south west, and three to the eastward.

"In all directions around, the fragments of other fallen buildings are to be seen, extending along the mountain that stretches east and west about three or four leagues either way; so that the whole range of this ruined town may be computed to extend between seven and eight leagues, but its breadth is by no means equal to its length, being but little above a half league wide.

"The interior of the large building, is in a style of architecture strongly resembling the Gothic, and from its rude and massive construction promises great durability. The entrance is on the eastern side by a portico or corridor thirty-six varas or yards in length, and three in breadth; supported by plain rectangular pillars without either bases or pedestals, upon which there are square smooth stones of more than a foot in thickness forming an architrave, while on the exterior superficies are a species of stucco shields, the designs of which accompany this report. Over these stones there is another plain rectangular block, five feet long, and six broad, extending over two of the pillars. Medallions or compartments in stucco, containing different devices of the same material, appear as decorations to the chambers, and it is presumable, from the vestiges of the heads which can still be traced, that they were the busts of a series of kings or lords to whom the natives were subject. Between the medallions, there is a range of windows like niches, passing from one end of the wall to the other; some of them are square, some in form of a Greek cross, and others which complete the cross are square, being about two feet high and eight inches deep. Beyond this corridor, there is a square court, entered by a flight of seven steps. The north side is entirely in ruins, but sufficient traces remain to shew that it once had a chamber and corridor, similar to those on the eastern side, and which continued entirely along the several angles. The south side has four small chambers, with no other ornaments than one or two little windows like those already described. The western side is

* Del Rio, page 5, says, "there is a stone aqueduct of great solidity and durability which passes under the largest building." Of this very interesting particular he communicates no further information, which shews how slightly he has described those ruins. Juarros, (*Hist. Guat.* 209,) also makes brief mention of this aqueduct, which he relates, to be "of sufficient dimensions for a man to walk upright in," and that "it yet exists almost entire." But his notice does not extend further.

correspondent to its opposite in all respects, but in the variety of expression of the figures in stucco, these are much more rude and ridiculous than the others, and can only be attributed to the most uncultivated Indian capacity.

"Proceeding in the same direction, (no course given nor can we guess it,) there is another court, similar in length to the last but not so broad, having a passage round it that communicated with the opposite side: in this passage there are two chambers like those above mentioned, and an interior gallery looking on one side upon the court yard, and commanding on the other a view of the open country. In this part of the edifice some pillars yet remain, on which are relievos apparently representing a mournful subject, alluding no doubt to the sacrifice of some wretched Indian, the destined victim of a sanguinary religion.

"Returning to the south side, the tower delineated in fig. 12, (Del. Rios Memoir,) presents itself to notice: its height is sixteen yards, and to the four existing stories of the building, was perhaps added a fifth, with a cupola, which in all probability it once possessed. Although these piles diminish in size, and are without ornament, yet the design of them is singular and very ingenious. This tower has a well imitated artificial entrance, as was clearly proved by making a horizontal excavation of more than three yards, which I wished to carry quite through the edifice, but was forced to desist from the operation, as the stones and earth slipped down in large quantities from the pressure of the solid body that passes through its centre. This, upon inspection, proved to be an interior tower, quite plain, with windows fronting the former, and gives light to the steps by which you are enabled to ascend to its summit.

"Behind the four chambers already mentioned, there are two others of larger dimensions, very well ornamented in the rude Indian style, and which appear to have been used as oratories. Beyond the oratories, and extending from north to south, there are two apartments each twenty-seven yards long, by little more than three broad: they contain nothing worthy of notice, excepting a stone of an elliptical form, embedded in the wall about a yard above the pavement, the height of which is one yard and a quarter, and the breadth one yard.

"Below the elliptical stone above described, there is a plain rectangular block, more than two yards long, by one yard and four inches broad, and seven inches thick, placed upon four feet in form of a table, with a figure in bas-relief in the attitude of supporting it.

"At the extremity of the last mentioned apartment, and on a level with the pavement, there is an aperture like a hatchway, two yards long, and more than one broad, leading to a subterranean passage by a flight of steps, which at a regular distance form flats or landings, each having its respective doorway ornamented on the front."

It is impossible to comprehend Del Rio's description of the many entrances to the subterranean apartments of this building. All we can understand, is, that artificial light was necessary to enable him to descend into these "gloomy chambers," which he describes as being two in number, each about sixty-four yards long; but he does not state their breadth. "Neither bas-reliefs nor any other embellishments were found in these places, nor did they present to notice any object excepting some plain stones, two yards and a half long, by one and a quarter yard broad, arranged horizontally upon four square stands of masonry, rising above half a yard above the ground.

"From this place I proceeded to one of the buildings situated on an eminence to the south, of about forty yards in height. This edifice forming a parallelogram, resembled the first in its style of architecture; it has square pillars, an exterior gallery, and a saloon twenty yards long by three and a half broad, embellished with a frontispiece on which are described female figures with children in their arms of the natural size, executed in stucco medio-reliefs.

"In the inner wall of the gallery, and on each side of the door leading into the saloon, there are three stones measuring three yards in height, and being upwards of one broad, all of them covered with hieroglyphics in bas-relief. The whole of this gallery and saloon is paved. Leaving this structure, and passing by the ruins of many others, or perhaps what is more probable of many buildings accessory to this principal edifice, the declivity conducts to a little valley or open space, whereby the approach to another house in a southerly direction is rendered practicable," &c.

"Eastward of this structure, are three small eminences forming a triangle, upon each of which is a square building, eighteen yards long by eleven broad, of the same architecture as the former; but having along their roofings, several superstructures about three yards high resembling turrets, covered with different ornaments and devices in stucco. In the interior of the first of these three mansions, at the end of a gallery almost entirely dilapidated, is a saloon, having a small chamber at each extremity, while in the centre of the saloon, stands an oratory rather more than three yards

square, presenting on each side of the entrance a perpendicular stone, whereon is portrayed the image of a man in bas-relief. Upon entering, I found the entire front of the oratory occupied by three stones joined together, on which objects are allegorically represented. The outward decoration is confined to a sort of moulding, finished with small stucco bricks, on which are bas-reliefs. The pavement of the oratory is quite smooth, and eight inches thick."

We shall omit any further particulars of the ruins of this ancient city, except to state, that these buildings were erected with a mortar of lime; a fact incidentally mentioned by Del Rio, page 20, who says, he had forwarded specimens of that cement for the inspection of the king.

Among the books that I have consulted on the antiquities of Guatemala, I have been unable to find any account or tradition, that gives us the least information concerning the founders of this ancient city. Del Rio does not appear to have known even its original appellation. Juarros (*Hist. Guat.* 19, 209,) seems to say that it was called Culhuacan. He also relates that the ruins were not discovered by the Spaniards until the middle of the eighteenth century, but this must surely be a mistake, and he can only mean that he would find no historical account of it at an earlier period; which will convey a sad idea of the apathy of his countrymen on such subjects, and justify the hope that we may yet receive relations of the greatest importance from scientific travellers, who may be able to examine this almost unknown, and highly interesting country.

With even the scanty information we possess, it is evident that Guatemala abounds with curious and extensive architectural monuments, but which the nature of our essay prohibits us to more than enumerate in certain particulars. Juarros, page 209, says, the ruins of Tulha, another deserted city in the province of Chiapa, "are sumptuous," though he gives us no description; and his brief account of the antiquities of Copan and the Cave of Tibulco, of Utatlan, Patinamit, &c., prove how many monuments are yet undescribed, when even the extensive ruins of Culhuacan were not known to the Spanish writers more than about sixty or seventy years since.

To make this part of our disquisition as complete as possible, and which indeed from the scantiness of other materials, we are compelled to introduce in order to establish the demi-civilization of the Guatemalan nations, we shall make some further extracts from Del Rio, to shew the identity of character and design among the various monuments of the country, as far as his research and information extended. By

this means we shall be better able to enter into the discussion of other matters not so well known. Del Rio (*Descript. of Anct. City near Palenque*, p. 7,) describes certain monuments in the province of Yucatan, which the reader will perceive are expressly compared with the ruins of Culhuacan near Palenque.

"At the distance of twenty leagues from Merida, southward, between the curacy called Mona y Ticul and the town of Nocacab, are the remains of some stone edifices; one very large building has withstood the ravages of time, and still exists in good preservation. The natives give it the name of Oxmutal. It stands on an eminence of twenty yards in height, and measures two hundred yards on each facade. The apartments, the exterior corridor, the pillars with figures in medio-relievo, are decorated with serpents, lizards, &c. formed in stucco; besides which are statues of men with palms in their hands, in the act of beating drums and dancing, resembling in every respect those observable in the buildings of Palenque. Eight leagues distant from the same city, to the northward, are the ruined walls of several other houses, which increase in number as you advance eastwardly.

"In the vicinity of the river Lagartos, at a town called Mani, which is under the actual jurisdiction of the Franciscan friars, in the middle of the principal square, stands a pilory of a conical shape built of stone, and to the southward, rises a very ancient palace resembling that at Palenque, which according to tradition, was inhabited upon the arrival of the Spanish conquerors by a petty Indian sovereign called Htulrio, who resigned it to the Franciscans for a residence while their convent was building. The erection of this palace was long anterior to the time of Htulrio, who replied to the inquiries of the fathers relative to the period of its construction, that he was totally ignorant of its origin, and only knew that it had been inhabited by his ancestors. From hence we may draw some inference respecting the very remote antiquity of the edifices at Palenque, buried for so many ages in the impenetrable thickets covering a mountain and unknown to the historians of the new world, by whom no mention whatsoever is made of their existence. On the road from Merida to Bacalar, there are also many other buildings both to the north and south," &c.

But if the reader has been surprised with the description of such extensive and even magnificent architectural ruins, which appear to be also not unfrequent in the kingdom of Guatemala, we conceive that a greater source of wonder will be found in what we have to say concerning the drawings,

sculptures, and hieroglyphics, found on the walls of these ancient monuments.

Appended to Del Rio's memoir, are seventeen plates, containing drawings of the various objects observed by him at the city near Palenque, and which are chiefly representations of the hieroglyphic or emblematical figures, to which he refers in various pages of his description.

Any one conversant with the picture books of the Mexicans, will be immediately struck with the very great superiority of the drawings exhibited by the Guatemalan artists, which we have every reason to think have been faithfully copied by Del Rio, as is manifested by the extreme minuteness with which all the details are expressed. The *tout ensemble*, has a character peculiar to itself, entirely different from any thing observable in the European style of drawing. We must also take notice of the identity of character preserved in every one of the plates, which to one accustomed to use the pencil, is not only abundant proof of the skill of the artist, but when these figures are unlike those to which we are accustomed, it becomes almost conclusive that the copy has been faithfully made.

In the decorations of the heads of the figures, we certainly discern something like the drawings of the Mexicans, who by this means expressed the name, history, or character of the individual thus represented, and which we may reasonably presume, answers the same intention in the Guatemalan drawings. But in the form of the body and limbs, and in the attitudes in which they are exhibited in Del Rio's plates, we have an accuracy of anatomical form and proportion, very far exceeding any thing hitherto found in Mexico. I know not whether the proportions of the human body are better represented by any European artist not of the first excellence; but at any rate, we may safely say, they are fully equal to the better class of sculptures among the Hindoos, as exhibited for instance, in the numerous plates to Moor's Hindu Pantheon.

This correctness of anatomical proportion in a sculpture of the people of Guatemala, which fell under the examination of Baron Humboldt, excited his doubts of its being altogether an aboriginal drawing, from the very circumstance of its being so much superior to those of the Mexicans. His scepticism, however, arose from the belief that the sculpture which he denominates "Mexican monument found at Oaxaca," (*Plate xi. Paris edition, folio,*) was brought to him as being of Mexican design. This was found to be a mistake, which he corrects in the notes to his *Atlas Pittoresque* 320,

or in the English translation, ii. 254, where he says the monument in question was found near the city of Guatemala.

In the plates to Del Rio's memoir, is one representing this same subject, and is copied perhaps from the very same sculpture, as the figures are exactly alike excepting some unimportant finishing in the ornamental decorations of the head. We are thus further enabled to establish Del Rio's claim to exactness as a copyist, and having ascertained this point in one instance, we may the more willingly rely upon the other drawings he has given; for in every one of the ten plates that contain human figures, is the very same style of design, and all are equally correct in anatomical proportions as the one described by Baron Humboldt as above quoted. The anticipated want of sufficient patronage prevents our furnishing the reader with a copy of some of the interesting drawings of Del Rio's memoir.

But the most curious and important matter of Del Rio's plates, are the hieroglyphic characters connected with several of those figures, whose exact forms and proportions we have just described.

As it is impossible by any language of description, to convey an idea of the nature of these hieroglyphic figures, we have selected for the purpose of illustrating our subject, a column of them, arranged in perpendicular order* opposite to the back of a remarkable personage, whom we presume to be a priest.

If we could have been able to exhibit a copy of the whole plate from which the annexed column has been extracted, it would be unnecessary to observe that the figures in the margin are not mere fanciful ornaments to the other parts of the sculpture, as persons unaccustomed to Mexican antiquities might suppose to be the case.

My first impression on viewing these hieroglyphics, was, that they were marks of days or years, according to a system analogous to that we have already described in our account of the Mex-



* We have not thought it amiss to observe, that other series of these hieroglyphics are placed in a horizontal line, and some like the two sides of a right angle, one side of which is horizontal, and the other depending from the right hand end.

ican astronomy. But a very little examination shewed that these hieroglyphics were not simple, but compound figures. I then supposed, that as the Mexicans had used their simple hieroglyphics in periodical series, that possibly these compound figures were made by the union of the different figures of a periodic series, which when thus combined, composed each group of the Guatemalan hieroglyphics.

But though I think, that generally, three figures may be discerned in each group, yet there are others apparently composed of two, four, and five figures, which not only destroys the regularity of such a composition as I had supposed, but it is evident besides, that this is not the key to the construction of the hieroglyphic group; for we ought then to find at least one or more figures in each compound, like the one which precedes or follows any particular group, which is not the case.

I am therefore unable to perceive any principle which would shew them to be hieroglyphic marks arranged either in an arithmetic or chronological order.

That these hieroglyphics express ideas, we can hardly doubt, as similar arrangements of them are annexed to various personages in Del Rio's plates, which are entirely different both in order and composition from those attached to any other figure. In a few instances, we have observed the repetition of some of the groupings in a different arrangement; but the component parts of the groups, may be frequently seen in the composition of different groups, united with other parts not found repeated.

Hence I would infer, that each group conveys an idea or sense analogous to the characters of the Chinese, who after making the mark of the radical, annex to it various other significant marks, by which the sense is almost infinitely extended in each genus of their ideas. To express myself more distinctly, we observe that among the Chinese the *heart* is a genus, whose radical mark perhaps originally of that shape, is now expressed by a curve line. By the addition of other significant marks to this radical, all the sentiments, passions, and affections, are denoted which can be referred to our moral feelings or sensibilities, and thus in like manner with the other characters of their writing.

The Chinese characters in present use, bear no resemblance to the objects they once represented; but this is supposed to have ensued from the greater facility with which the present marks are made, being the result of the changes constantly taking place in every succeeding age, by which each generation of writers endeavoured to simplify the characters used

by their predecessors. But originally, according to the best authority, (*Morrison, Chin. Dict.* x.) it seems highly probable, perhaps "unquestionable," that the characters of the Chinese language "originated in pictures of visible objects, and from thence by allusion gradually extended from things visible and capable of being represented, to things immaterial and beyond the cognizance of the senses." This I believe is also the opinion of the Chinese themselves.

Assuming therefore the fact, that the characters of the Chinese writing were originally hieroglyphics more or less abridged in the drawing, I think we may safely infer, that the Guatemalans had proceeded on a similar plan, and that their hieroglyphics do not represent sounds or words, but ideas, which by some arbitrary system are connected together, so as to convey to the mind those particulars of history or religion, they might consider important to record.

Though we labour under the very great disadvantage of not knowing the real signification of these hieroglyphics, I think we cannot be wrong in considering them as expressing ideas on the Chinese plan. But as the monuments of Palenque are still in existence, it is to be hoped that some man of science will ere long ascertain the real nature of these singular hieroglyphics with greater force of argument than we have been able to apply to the subject.

We have no information whether similar hieroglyphic characters are found in other parts of Guatemala, a circumstance, however, we need not be surprised at; for Del Rio does not clearly appear to me, to have been aware of those that he has depicted in his plates of the ruins of Palenque. But as he describes some monuments in Yucatan to be adorned with figures of men and animals, similar to those he has described on the ruins of that ancient city, it is by no means improbable that the hieroglyphic characters are to be observed there also.

Of the Books, and Scientific Attainments of the Guatemalan Nations.

We have abundant proof that the natives of the various provinces of Guatemala had many books among them when they were first invaded by the Spaniards. They are particularly mentioned as having been found in Yucatan, Honduras and Nicaragua. (*Acosta, Nat. and Mor. Hist. lib. 6. chap. 7; Herrera, iii. 300, iv. 164, 165, 175, &c.*) These books are in general terms described to have been made of the leaves of trees, square, and folded like bellows, "in which after their manner, was contained the distribution of their

times, (calendars) the knowledge of plants, beasts, their antiquities, and other curious matters," &c.

The general comparison is also made that they were like the pictured writings of the Mexicans. "They used the same figures instead of letters as those of Mexico," says Herrera; by which we can understand that they were hieroglyphical in their appearance; but that they were exactly like those of the Mexicans I question whether the Spanish barbarians took the trouble to ascertain. For at an early period, some stupid priests caused all the books they could lay their hands on to be committed to the flames, as containing "matters of enchantment and witchcraft."

By this deplorable fanaticism and stupidity, we are left almost entirely in ignorance concerning the science, religion, and history, of this most interesting part of America. Can we cherish the hope excited by Baron Humboldt, that a considerable number of historical paintings, after the lapse of three hundred years, may be still found in the hands of the Indians of Oaxaca, Yucatan, Guatemala, &c.? Let us at least hope, that some of the literati of Europe will make an attempt to explore this unknown part of America, and recover those things, that time has spared to this day.

Among all the collections of picture writings usually denominated Mexican, that have been preserved by European curiosity, there are none that I know of that are considered of Guatemalan fabrication; at any rate, none are so désignéed by Baron Humboldt, the only *savant* who has treated expressly of such subjects. Yet I cannot but think it highly probable, that one at least, has been preserved from the general destruction, which that great antiquarian has introduced in his *Atlas Pittoresque*, without particular recognition. We allude to the hieroglyphic manuscript preserved in the royal library of Dresden, of which a specimen is furnished in the 45th plate of Humboldt's splendid work.

We are induced to make this observation on that manuscript, from perceiving that around the figures of men and animals depicted on the pages, are a number of hieroglyphic characters, arranged in horizontal lines as if containing matters of comment or explanation. That these characters are really ideographic, I think will be the impression of every one that inspects the plate of Baron Humboldt's atlas, and from being so much like the characters depicted in Del Rio's monuments of Palenque, I presume, is plausible ground to infer a Guatemala origin for the Dresden manuscript.*

* Peter Martyr, (*Hackluyt's W Indies*, 168,) describes the books of the people of Yucatan, to be written "in characters which are very unlike ours,

Baron Humboldt calls this manuscript Azteck or Mexican, but as he was ignorant of its existence, until after his great work on the monuments of America was actually in press, he had not sufficient time to investigate particularly its history and origin. It is said in the English translation of Humboldt's Researches, that this manuscript was purchased at Vienna, by the librarian Gœtze, in his literary journey to Italy A. D. 1739. The Baron's words are not so positive, being, "paroit avoir été acheté à Vienne." The correction, however, in this instance is not of much consequence.

Humboldt describes it to be drawn upon paper made of *metl*, (Agave Mexicana,) and like other manuscripts he had procured in Mexico: "but what renders it most remarkable, is the disposition of the simple hieroglyphics, many of which are arranged in lines as in a real symbolic writing. On comparing the 45th plate with the 13th, and 27th, we see that the Codex Mexicanus of Dresden, resembles none of those rituals, in which the image of the astrological sign, that governs the half lunation or small period of thirteen days, is surrounded by asterisms of lunar days. Here a great number of simple hieroglyphics follow each other without connexion, as in the Egyptian hieroglyphics, and the keys of the Chinese." (*Humboldt, Res. ii. 146*)

We cannot but regret, that this great archæologist had not sufficient time to study this singular manuscript at full leisure; for we can only suggest considerations derived from his plates, under every disadvantage that could embarrass the investigation. But we cannot err in saying, that not only the hieroglyphic characters of this manuscript, distinguish it from all others of Mexican workmanship, but the very drawings of men and animals, and particularly of the former, are much superior to any similar work of undoubted Mexican fabrication, as far as they are represented in the Atlas Pittoresque. We have therefore two particulars, first, in the hieroglyphic characters, and secondly, in the superior drawing, by which we may be apparently justified in the belief, that the Dresden manuscript is not of Mexican origin; and in these points of difference, it agrees with what we should expect from the hands of the Guatemalan artists.

but written after our manner, line after line, with characters like small dice, fish hooks, snares, files, stars, and other such like forms and shapes; and between the lines, they paint the shapes of men and beasts, especially of their kings and nobles."

This relation seems to agree very well with the character of the Dresden manuscript; and Peter Martyr's description of the proper Mexican books at page 234, will justify the belief, that the last were different in appearance from the former.

But having this presumptive proof that the Dresden manuscript was not derived from the hands of the Mexicans, can we be altogether certain that it was painted or written in Guatemala? This new source of embarrassment arises from the singular fact, that the Panoes, a people of the present kingdom of Peru, have pictured books among them, the description of which will also in general accord with the appearance of the Dresden manuscript.

The Panoes live on the banks of the Ucayale river, the principal branch of the Amazon, a little to the north of the mouth of the Sarayacu, (lat. $6^{\circ} 30'$ S. lon. $72^{\circ} 30'$ W.) They are considered at present but a barbarous tribe, though in fact, we hardly know any thing concerning them. Humboldt, (*Res.* i. 174,) gives us a most interesting particular of their history on the authority of a respectable Spanish missionary who had visited them, and procured one of the books seen in their possession, which was sent to Lima for literary examination. After a slight inspection by several persons of that metropolis, this interesting book disappeared, and has not been discovered since.

According to the account given to Baron Humboldt of this manuscript, by the missionary and those who had seen it at Lima, it resembled our volumes in quarto, "pieces of tolerably fine cotton cloth formed the leaves, which were fastened by threads of the agave. Every page was covered with paintings. These were figures of men and of animals, and a great number of isolated characters which were deemed hieroglyphical, arranged in lines with admirable order and symmetry. The liveliness of the colours was particularly striking," &c.

Hence the description of this book of the Panoes, as far as respects the figures and hieroglyphics on the pages, is very similar to those of the Dresden manuscript, and we are not a little perplexed to decide, whether it be from the Panoes, or of Guatemalan origin. The arguments in favour of the last supposition, are its similarity in details to the drawings of men, and the hieroglyphic characters, copied by Del Rio from the ruins near Palenque, and also that it is painted upon paper made from the Mexican aloe; which manufacture we have hitherto considered peculiar to the Mexicans, Guatemalans, &c.

The book of the Panoes is described to have been made of tolerably fine cotton cloth, "the pages of which were fastened by threads of the agave," (aloe.) In this particular it differs from the Dresden manuscript, which is of paper made from the agave, but this circumstance is not altogether con

clusive, for the Panoes may have had books also made from the agave, the thread of which they are said to have used in fastening the leaves of the book sent to Lima.

The possibility of procuring a book from the Panoes, is attended with very great difficulties from their remote inland situation; yet Quesada, Hutten, and some other ruffians, (*Humboldt, Pers. Nar.* v. 820,) had reached near their very neighbourhood in the middle of the 16th century, when searching after the city of the famous El Dorado, and might have obtained the manuscript in question; or it may have been procured by some Spanish trader or missionary at a much later period of time.

We might cut the knot that embarrasses us by supposing the Panoes of Toltecan or Guatemalan descent, a suggestion intimated by Humboldt; but we are not justified by this one fact of their having pictured books, to make that supposition; for certainly there is nothing exclusively Toltecan in the invention.

Under these circumstances of perplexity, the safest course we can follow, is, after putting the reader on his guard by the above recital, to consider at least for the present, that the Dresden manuscript is of Guatemalan fabrication; as it presents greater internal evidence in favour of such an hypothesis, and there are perhaps fifty chances to one, between the probabilities of procuring it from Guatemala than from the remotely situated Panoes.

We are unacquainted with any other matters of a scientific nature involved in the history of the Guatemalan nations, excepting their astronomic calendars; whose features we perceive were exactly like those of the Mexicans, concerning which we have discoursed at length in the preceding chapter. This conformity was to be expected; for the Mexicans attributed their knowledge of that system to the Toltecas, whose civilized institutions we have every reason to believe, were generally imparted to the Guatemalan nations.

It was a fortunate circumstance that the early writers upon Mexican antiquities, preserved the plan or construction of these calendars in their histories of that kingdom; for though we can understand the allusions and comparisons made by the Spaniards, to the identity of the Guatemalan arrangement of time, with that of the Mexicans, yet without our previous knowledge of the subject, no one would in the least suspect their ingenious and artificial composition, from any account we have hitherto seen of the people of Guatemala.

In Honduras, according to Herrera, (*Hist. Amer.* iv.

141,) the natives called their year Joalor, (*that which passes away*,) dividing it into eighteen months, each of twenty days. So also in Nicaragua, (*Herrera*, iii. 300,) the same arrangement is implied in the expression, "the priests proclaimed the festivals, being eighteen in number, as they did the months, standing on the steps of the place of sacrifice." In Yucatan, they appear to have had two modes of computation, (*Herrera*, iv. 176,) one of which was exactly the Mexican, or rather Toltecan calendar of eighteen months of twenty days, and five nemontemi. The other is thus described: "Their year was exact like ours, consisting of 365 days, divided into twelve months, five days, and six hours. The months they called V,* signifying moon, and they reckoned from her first appearing new until she was not to be seen."

I know not what to say upon this last distribution of time, for we have met with nothing similar to it among any of the demi-civilized nations of America. In Peru, and among the barbarous nations, the year may be said to have been composed of months or moons, but in no case was it so adjusted, as to complete the entire number of days in a solar year. I rather suspect, it was a common lunar year that *Herrera* has thus described, though he is certainly very exact in his account of its divisions and parts. The reader will understand, that it is only to the division into twelve months that we demur; for the Toltecas knew the exact length of the tropical year, as we have abundantly shewn in our discourse on the astronomy of the Mexicans.

The Chiapenese, also divided their year into eighteen months of twenty days; and we have this additional information, that instead of using the twenty simple hieroglyphics of the Mexicans to distinguish the days of the month, they employed the names of twenty illustrious individuals of their ancient heroes; four of whom being particularly eminent, serve to distinguish the commencement of each small period of five days, into which the month was divided. As all these matters have been discussed in our history of the Mexican astronomy, we shall not again repeat our observations in this place.

Of the Religion of the Guatemalan Nations.

Concerning the religion of the nations of Guatemala, we have collected some very curious particulars, but which as

*I do not know whether *Herrera* means the sound of the letter V, in Spanish *vay*; or the sound of the number V, *cinco*, five.

we have too often had occasion to lament, have been communicated by the Spanish writers without order or method; sometimes in a diffuse relation, at other times being only mentioned incidentally, and often barely alluded to without reference to any other account. We shall endeavour to lay before the reader, all the information we have been able to procure, and in the most consistent manner we can devise, but which indeed, will too often appear in fragments, unconnected with the subject that may precede or may follow in our arrangement.

The people of Yucatan, (*Herrera*, iv. 176,) believed in the immortality of the soul, and in separate places of existence for the virtuous and the wicked after death, in which the former enjoyed every kind of happiness according to their estimation of felicity, and the latter suffered "hunger, cold, sorrow and torment."

These people, according to *Herrera*, "knew that the plagues and calamities that befel them, were occasioned by their sins, and therefore they used confession when sick or in any danger of death. They declared their sins in public, (i. e. openly) and if they omitted any thing, their kindred put them in mind; the confession being made to the priest if present, or else to fathers or mothers, or wives to their husbands. The sins so confessed, were theft, murder, fornication, and perjury; but they did not confess any sins of intention, though such were looked upon as evil."

The practice of thus confessing sins, it may be presumed, was a general one throughout the kingdom; for it is mentioned incidentally in several places, and particularly in Nicaragua, (*Herrera*, iii. 300,) where they perhaps shewed some wisdom, in permitting matrimony to the priests who heard confessions, while they required celibacy from others not thus employed.

The term, "confession of sins," I doubt not will sound very strangely to the ears of many of my readers, who considering the words in a technical or theological sense, may be disposed to suggest many modes of explaining this practice among the Guatemalan Indians, rather than directly admit the simple fact. I presume, however, there is nothing so very singular in the statement, when we consider, that these nations believed in the immortality of the soul, and future retribution for the good or evil actions of their lives. Hence believing that they lived under the superintendence of a special providence by whom they would be judged hereafter, nothing is more natural than that they should profess penitence for their misdeeds, which is all that is implied by the

words, "confessing their sins," i. e. they acknowledged that certain actions of their lives, had been wrong or improper, and by confessing them to have been such, the inference is direct that they would not again repeat or commit them.

Though it is evident that these confessions were made to "fathers, mothers, husbands," &c. yet it is very probable, they preferred making their profession of penitence to the priests, who would naturally be considered more wise and holy than ordinary individuals, as being engaged in the immediate service of their deities, and therefore more potential in any application to be made in their behalf.

Hence the simple belief in a superintending providence, would lead to the practice of confessing sins; then of preferring a priest to advise or assist them, and finally would induce the belief, that the priests could not only procure them immunity for past transgressions, but also health and other temporal enjoyments. We may likewise suppose, that the priests were not inactive in establishing their own importance in these particulars; for they no doubt encouraged such a belief in the people, and confirmed their influence by fraudulent oracles and miracles, as we are indeed, expressly informed by Herrera. (*Hist. Amer.* iv. 173.)

I apprehend, therefore, that nothing is more natural to any pagan nation possessing a moral sense, than the course pursued by the Guatemalans, and which may indeed, be perceived in the religious institutions of them all. Mr. Volney, (*Les Ruines*, note 87,) in his zeal to attack christianity, did not discriminate between the abuse of confession, as a priestly appendix to christianity, and the natural conscientiousness of acknowledging our faults whenever we have done amiss. And he therefore makes the following observation, "La confession etait pratiquée dans les mysteres Egyptiens, Grecs, Phrygiens, Persians, &c." We do not doubt it has been practised in the same manner all over the pagan world.

Herrera (*Hist. Amer.* iv. 172,) says, that baptism was known in Yucatan, though not in any other province of New Spain; he also says "the name they gave it, signified to be born again; believing they in it received a pure disposition to be good; that the devils could not hurt them, and that they were put in the way to bliss. No man could be married without it," &c.

From the manner in which he describes the ensuing ceremony to have been performed, I presume, that when the Yucatanese children reached a certain age, they were subjected to this aspersion, which will convey to us a pretty good idea of the real nature of the ceremony. The priest, says

Herrera, "came out in long and decent vestments, with a sprinkler in his hand; white cloths were laid on the children's heads, and the biggest of them were asked whether they had committed any sin, and when they had confessed, they were set aside and blessed with certain prayers, shaking the sprinkler at them, and dabbing their foreheads and features, and between their fingers and toes, with a sort of water they had in a horn. Then the priest took off the cloths from the children's heads, and having received some presents, the solemnity ended in feasting."

Though Herrera calls this ceremony, "baptism," it was certainly nothing more than one of those forms of lustration or purifying, which have been practised among all pagan nations who have attained a certain degree of civilization; and who naturally enough perceive the metaphorical propriety that exists between purity of life and manners, and the use of white and clean garments, or of clean water either applied by sprinkling or by ablutions of the person. A very little acquaintance with the rites of paganism sufficiently establishes this point.

The ancient Persians, (*Hyde Rel. Vet. Pers.* 113,) the Greeks, (*Potter's Grec. Antiq.* i. 176,) the Druids, (*Tolland, Hist. Druids*, 305,) and almost every other civilized pagan nation made use of similar baptisms, as they have been called by various writers. Tertullian in Hyde, as above quoted, says, "In suis etiam sacris habebant Mithriaci lavacra, (quasi regenerationis) in quibus tingit et ipse (sacerdos) quosdam utique credentes et fideles suos, et expiatoria delectorum de lavacro repromittit, et sic adhuc initiat Mithræ."

Mallet (*North. Antiq.* i. 335, 336,) observes, "It is remarkable that a kind of infant baptism was practised in the north, (of Europe) long before christianity had reached those parts." Of this practice he cites various instances.

Purchas reports from Gomara, or Peter Martyr, (*Pilgrims*, v. 885,) that "some of the idolaters of Yucatan were circumcised, but not all." Is there any mistake in this matter? I have no means of ascertaining the truth. The fact, however, is not mentioned by Herrera, nor by any other Spanish writer within my reach. I am inclined to think it a misconception, altogether arising from a slight observation of the self-lacerations, which these idolaters inflicted on themselves, by which they drew blood from wounds made in various parts of the body as well as from their privates, of which we shall speak hereafter. Supposing, however, that possibly Gomara may be correct in his statement, I will observe, lest some of the advocates of the Jewish hypothesis, may claim

this circumstance in their favour, that circumcision was not a ceremony peculiar to the Jews alone. It is very widely practised among the natives of the South sea islands, as may be seen in almost every voyager's account of that ocean. The Egyptians, Ethiopians, and Colchians, also practised this ceremony from the remotest antiquity, which is not satisfactorily explained by the supposition that they acquired it from the Jews.*

That human sacrifices were made in various parts of Guatemala we have express information. Grijalva, when he first arrived at the island of Cozumel, (*Herrera*, ii. 121,) found persons there who informed him of this particular; and we are instructed by the same authority, (*Herrera*, iii. 300, iv. 154, 155, 169, 174,) that similar sacrifices were made in Yucatan, Honduras, and Nicaragua. Their ritual appears to have been precisely similar to that of the Mexicans. Herrera seems to think, these inhuman rites were not properly original institutions of the country, but had been derived from the Aztecks or Mexicans. This is probably but an erroneous conjecture, for the universality of human sacrifices all over the pagan world, makes this superstitious cruelty too congenial to mankind, to seek its origin in a simple imitation of the barbarous rites of an adjoining people. It is, however, a reasonable supposition, that such sacrifices were much less frequent in this kingdom than in Mexico; for Herrera informs us, that "the office of ripping open the breasts of men sacrificed, which was honourable in Mexico, was not so here."

We presume, they also sacrificed birds and smaller animals to their gods, and fumigated them with gum copal, &c. but of these particulars, we have not met with any account in Herrera or Juarros, except an incidental notice of the latter practice at the island of Cozumel, where Herrera, ii. 169, also says, a high priest preached to the Indians while performing their idolatrous rites.

In the account of the Nicaraguans given by Herrera, (*Hist. Amer.* iii. 301,) we perceive that they made religious processions in honour of their deities. The one that he has described, being important in its bearing upon other matters in our disquisition we shall extract at some length.

"When the priest daubed the idol's face with the blood of the person sacrificed, the rest sang, and the people prayed with tears and devotion, and walked in procession, though not upon all festivals." At such times as they were made, "the laymen carried little flags representing the idol they

* Bishop Cumberland (*Third Remark on Sanconiathe*.) was of the same opinion.

held in most veneration, &c. The standard was the picture of the devil, set upon a spear carried by the oldest priest; they proceeded in order, the religious men singing, to the place of the idolatrous worship. There they covered the ground with carpets, and strewed roses and flowers, that the devil might not touch the ground. The standard being fixed, the singing ceased, they fell to prayer, the prelate gave a stroke with his hand, they drew blood at their tongues, others at their ears, others at their privities, or according as their devotion led them: they received the blood on a paper, or their fingers, and daubed the idol's face. In the mean time, the youth skirmished and danced in honour of the festival. At these processions, they blessed Indian wheat (maize) sprinkled with the blood of their genitals, which was distributed and eaten like blessed bread."

We here perceive a ceremony analogous in certain particulars, to the one described when speaking of the religion of the Mexicans, where bread made with blood was consecrated and eaten by them as a part of their religious observances. The foregoing account of the Nicaraguans, affords additional confirmation to that extraordinary practice, which we have also shewn, has prevailed among many pagan nations of either continent the most remotely separated from each other. We shall not again repeat the observations made at that place, (page 240,) but it may not be altogether amiss, to call the attention of the reader to the statement made by Herrera, that the Nicaraguans sprinkled the maize used on such occasions with blood drawn from their genitals.

As the wounds or injuries inflicted upon these organs, are more painful than upon any other part of the human body, it may be worth while to ask, why the blood used in the preparation of this consecrated maize, was drawn from these sensitive parts, in preference to that which they drew at the very same time from other members of the body? Was it selected with some metaphorical reference, as proceeding from sources of life? and by which, in a very gross manner, they imparted the idea of something spiritually vivifying? I shall not undertake to decide this question, though when taken in connection with other matters belonging to the religion of the Mexicans, Peruvians, and the idolaters of the eastern continent, (see page 240,) it is not undeserving of serious consideration. We may very safely say, there was

* The *phallus* was carried in the ancient mysteries of Egypt and Phœnicia, as an emblem of that mystical regeneration and new life to which the initiated had pledged themselves. Tertullian, (contra Valent:) says, "virile membrum totum esse mysterium." (*Warburton Div. Leg.* i. 168, 169.)

nothing lascivious connected with the ceremony, and the Spanish writers have attributed nothing of that nature to the procession.

The priests exercised great authority over the Guatemalan nations, and in not a few incidental relations of Herrera, they seem to have been at least equal with, if not superior to the caciques or kings of the country, Herrera states, that in Yucatan, the people were "very submissive to the priests." We have already observed, that the Chiapenese priests chose the executive officers that ruled that nation, and on various occasions, the high priests of different provinces of this kingdom were present in time of battle, being posted along with the general of the army, who most commonly was also the king of the country.

We may infer the great importance of the high priest among the people of Honduras and Nicaragua, by the following statement of Herrera. (*Hist. Amer.* iv. 155, 156.) When the high priest died, the people lamented him and fasted fifteen days; but when the cacique, or the general, or even their own children died, they mourned for them but four days.

From the frequent mention that is made of high priests, confessors, &c. and the implied distinction between them and other priests, there can be no doubt, there was a regular hierarchical establishment among the different nations of Guatemala, but concerning this subject we have no information, except in a brief notice of the Pipils of Honduras, which we may presume, is a pretty fair exhibition of the general ecclesiastical establishments of the kingdom. "Besides their lord," (*Herrera*, iv. 154,) "they had an high priest, who wore a long blue garment, with a diadem on his head, and sometimes a mitre wrought with several colours, and at the labels of it a bunch of divers coloured feathers, carrying a crozier like a bishop,* and was obeyed by all persons in spirituals. The next to him was a notable doctor in their books and soceries, who explained their omens. Four more priests there were clothed in several colours, all admitted to council in such things as appertained to their rites. A sacrist kept the jewels and things that belonged to their sacrifices, and pulled out the hearts of men sacrificed. Others sounded trumpets and such instruments as were used to call the people to the sacrifices."

Among this people when the high priest died, his successor was chosen by lot among the four members of his coun-

* These words *mitre* and *crozier*, are instances of the common practice of the first conquerors of America, to call things by names often founded in the slightest similitude to those objects they had been accustomed in Europe.

cil, as already stated. In Yucatan the office was hereditary and he was succeeded by his son.

The dress of the priests in general (*Herrera*, iii. 301,) appears to have been "white, short, some narrow, others had them hanging from their shoulders to their heels; with purses instead of tufts or tassels, in which they had sharp pieces of jet, papers, coals powdered, and certain herbs."

The priests were not permitted to marry, excepting those who heard confessions. (*Herrera*, iii. 300.)

I presume, that like the Mexicans, they had monks or celibates established in various parts of the kingdom. In the province of Honduras, we are informed (*Herrera*, iv. 139,) of the following particulars, which I consider points out such an institution. "In the fields were little houses, long and narrow, and high from the ground, in which were their gods of stone, clay, wood, &c. and with them were old men naked, who lived an austere life, wearing their hair very long wound in tresses about their heads; of them they asked advice in martial affairs, administration of justice, marriages, and the like, leaving them offerings of eatables, &c. None but the prime men might talk with those priests because they held them in great veneration."

Though we find the Spanish writers constantly mentioning the temples of the natives of Guatemala, they have scarcely given us an account of their form and construction. The most particular relation I have met with, is that of a temple at the island of Cozumel, when first visited by Grijalva. "They saw" (*Herrera*, ii. 121,) "several places of worship and temples, and particularly one in form like a square tower, wide at the bottom and hollow at the top, with four large windows and galleries; and in the hollow part being the chapel, were the idols, behind which was a sort of vestry, where the things belonging to the service of the temple were kept. At the foot of it, was an enclosure of lime and stone, with battlements, and plastered," &c.

This description agrees very exactly with the tower described by Del Rio among the ruins near Palenque, as may be seen page 296.

We may likewise presume, that other monuments of that ruined city were for religious use, and also that the greater part of the architectural remains with which Guatemala appears to abound, were also of this character. *Herrera* considers them in this light; for when speaking of what he calls "the stately stone buildings" of Yucatan, he remarks, "they seem to have been temples, for their houses were always of timber and thatched."

It is impossible for us to state from our scanty materials, whether the people of Guatemala erected any of those truncated pyramidal mounds with temples on their tops, such as we have described when speaking of the idolatry of the Mexicans. We presume, however, they did. Del Rio, as the reader may have observed in the extracts taken from his memoir, speaks frequently of the mounds upon which the ruins at Palenque are built, but he does not describe them particularly. Neither Herrera nor Juarros, make particular mention of this matter.

From Juarros we learn, that in certain instances, the people of Guatemala made use of caverns for religious worship, the description of which forcibly reminds us of the rock caverns and temples of Ellora, Elephanta, and other similar monuments of Hindoo workmanship. (*As. Res.* iv. 407, vi. 389, &c.)

"The cave of Tibulca," (*Juarros*, 57,) "appears like a temple of great size hollowed out of the base of a hill, and is adorned with columns, having bases, pedestals, capitals, and crowns, all accurately adjusted according to architectural principles; at the sides are numerous windows, faced with stone exquisitely wrought."

"The cavern of Mixco" (*Juarros*, 488,) "has a portico formed of clay; it is in some parts entire and appears to be of the Doric order. From the entrance, a flight of thirty-six stone steps descends to a lofty saloon about sixty yards square; from this chamber the descent continues by another flight, beyond which nothing more is known, as no person sufficiently courageous or imprudent enough to resist the tremulous motion of the ground under foot, has yet advanced more than a few paces. Descending eighteen steps of this second flight, there is on the right hand another doorway forming a perfect arch; and having passed this, there are six steps, in all similar to the former, from which there is a passage about one hundred and forty feet in length. Further than this part it has not been explored; many extraordinary accounts of it have been fabricated, but they are such as will not bear repeating."

We have no knowledge concerning the particular rites or service performed in these subterraneous temples. They have in the eastern continent, been devoted to the celebration of the highest mysteries of paganism,* and in which, to use the words of an author not unfrequently eloquent,

*"Porphyry assures us, that holy grottos were symbols of the world, and the whole analogy of paganism proves him to be right in his assertion." (*Faber, Orig. Idol.* i. 30.)

(*Maurice, Indian Antiq.* ii. 393,) "the hoary sages of antiquity caused to be acted over again the mighty drama of life and of nature."

But though we are ignorant of all the particulars connected with the cavern temples of Tibulca and Mixco, the reader will not fail to observe, how much these things confirm our belief that in Guatemala the most civilized and polished people of America were anciently established; and how much it is to be regretted, that their history, their hieroglyphic books, and other matters that would have elucidated this subject, have perished perhaps without hope of recovery.

Nevertheless, something may be yet done, and we cannot too earnestly urge the zeal of European antiquarians, to visit and explore the monuments of this most interesting country, before every thing falls under the apathy or fanaticism of its present native inhabitants.

To what particular deities, the idolatrous homage of any Guatemalan nation was especially directed, we have but the most scanty information, and of their appellations, among all my books I have been only able to ascertain one name, and that without the least information of nature or sex. This knowledge is contained in the following words of Juarros concerning the people of the town of Uspantin; (*Hist. Guat.* 471,) who he says, tore out the hearts of their prisoners of war, "which were presented as an offering to the idol Esbalanqueen."

Professor Raffinesque of Philadelphia, however has communicated to me the following catalogue of the deities worshipped by the people of Yucatan. This list has been taken from Ayeta's *Hist. of Yucatan*, a single copy of which is to be found in the United States, in the University Library of Cambridge near Boston.

STUNAHKU, god of gods; who was not represented by any image. His first son was *Hun Itzamah*, or *Yaxcohamuc*.

The triple gods, were IZONA, god-father; BACAB, son; ECHVAH, the god of merchants.

ZAMNA, ITZAMNA, or IX-KOMLEOX, was the legislator of Yucatan. He was the son of the god KIUCHAHAN, and the goddess IXCAZALVOH, who invented weaving.

YZCHEBELYOX, invented painting and writing.

CHAC, a giant god who invented agriculture.

AH-CHUY-KAK, god of war

MULTUNTIZEC, god of evil.

CHILAM-CAMBAL, god of strength.

CITBOLUNTUM, god of health and medicine, he had a wife named *Yzchel*.

PIZLIMTEC, god of poetry.

AHKINXUUC, god of music.

XUCHITUN, god of song.

KUKULKAN, the founder of Mayapan; he was represented with a wheel of fire. We have mentioned this personage in page 278.

The Pipils of Honduras, (*Herrera*, iv. 155,) "worshipped the rising sun, and had two idols, one in the shape of a man and the other of a woman, to whom they offered all their sacrifices." These two divinities, I presume, were the same with those worshipped in other parts of Honduras, under the very ancient idolatrous appellations of great father and great mother. *Herrera*, (*Hist. Amer.* iv. 138,) relates, "among the many idols they worshipped, there was one called the great father, and another the great mother, of whom they begged health; (or life?) to other gods, they prayed for wealth, relief in distress," &c.

Idols made of stone, wood, and clay, representing "men, women, and serpents, others with faces like devils, or other hideous creatures," were observed by the Spaniards in various parts of the kingdom of Guatemala. (*Herrera*, ii. 112, 124.) That they were also in great abundance, we may judge from what ensued after Ursua conquered the island of Peten in Lake Itza, (Yucatan,) "so great was the number of idols found in twenty-one places of worship that were in the island, as well as in the private houses, that the general, officers, and soldiers," (one hundred and eight in number, besides confederate Indians,) "were unremittingly employed from nine o'clock in the morning until five in the afternoon in destroying them."

Herrera (*Hist. Amer.* ii. 112,) says, that at a temple near Cape Catoche, (Yucatan) the Spaniards observed, "idols of men lying one upon another representing the sin of Sodom." This may have been simply a mistaken impression of the Spaniards, or a vile aspersion, by which they often procured the assent of the priests who accompanied their banditti expeditions, to destroy and plunder the natives as enemies of God and virtue. It would be a very important fact, however, should that particular abomination be indeed connected with their religious system, for in this kingdom we have already remarked they adored the great father and mother; a species of worship which with the ancient idolaters of Asia, in the estimation of the Rev. Mr. Faber, unconscious of this particular instance, has led to the very practice of that unnatural vice.

I believe it is Peter Martyr (*Purchas Pilgrims*, v. 885,) who remarks, that at a town called Campeche (in Yucatan) the Spaniards under Grijalva, "saw a square stage or pulpit four cubits high, partly of clammy bitumen and partly of small stones, where to the image of a man cut in marble, was joined two four footed unknown beasts fastening upon him as if they would tear him in pieces. And by the image stood a serpent all besmeared with blood devouring a lion, (the cougar) it was seven and forty foot long, and as big as an ox."

These figures no doubt had their special or allegorical significations, but of the particulars we are entirely ignorant. They appear, however, to be very different from any thing I have been able to observe in the history of the Mexican idolatry.

In Honduras, the natives held a tradition concerning the origin of their religious institutions, which involves some very curious particulars, and which perhaps, will throw some light upon a feature observed in the history of paganism, that has not a little embarrassed the speculations of many writers upon idolatrous antiquity. As every thing that tends to elucidate the mysteries of paganism is both interesting and important, we subjoin the following relation of Herrera, (*Hist. Amer.* iv. 137.)

"All that could be learned of the antiquities of this province, (Cerquin) is the tradition delivered by old men, that two hundred years before the arrival of the Spaniards, a lady came thither whose name was Comizagual, (*flying tiger*.) They said, she was white like a Spaniard, skilled in art magic, and settled at Cesaloquin, the most fruitful soil in that province, where the stones and lion's faces they worshipped were, and the great stone *with three points, on each of which are three hideous faces*; and some of them say, that lady brought it thither through the air, and that by virtue thereof she gained battles and extended her dominions; that she had *three sons* without being married, though others say they were her brothers, and that she never knew man; and that being grown old she divided her lands among them, with much good advice for the government of their subjects, that she ordered her bed to be brought out of the house, and there came a great flash of lightning with thunder, and they saw a most beautiful bird flying, and she never more appearing, they concluded it to be the lady soaring up to heaven, &c. The three brothers then divided the province of Cerquin among themselves, and governed it very politically, the inhabitants being brave and warlike. The lady

Comizagual being a magician practised much sorcery, and consequently introduced what religions and superstitions she thought fit among the people. Among the many idols they worshipped, there was one called the great father, and another the great mother," &c.

We perceive in the foregoing tradition, some of those features of a triune worship and history, which also observed in various other parts of the ancient pagan world, has exceedingly perplexed all writers to explain so curious a circumstance. From its apparent conformity with a dogma of the christian religion, it is not surprising that much attention has been paid to the subject, and that various conjectures have been hazarded, to explain how the pagan nations of antiquity became possessed of so mysterious a doctrine. But notwithstanding appearances, we do not conceive that the ideas of the pagans on this subject, have any connexion with a religious faith: but that they are based upon historical traditions of events connected with the first ages of the world, to which the Honduras tradition seems to allude, as expressly as any other relation we have seen in the mythological histories of either continent.

The appearance of a triad in pagan theology, has been observed among the Hindoos, Chinese, Persians, Canaanites, Syrians, Goths, Celts, &c. For the purpose of a general reference, see Faber, *Orig. Pag. Idol.* iii. 469. We were entirely embarrassed to explain the circumstance, until the Rev. Mr. Faber's profound and elaborate work on the Origin of Pagan Idolatry, came into our hands. We apprehend, that he has shewn with the greatest plausibility, if not with absolute truth, that the pagan triads originated in the history of Adam and his three sons, but more especially in that of Noah and his three sons. As we cannot lay before our readers Mr. Faber's arguments upon this point, which are scattered through the various chapters of his great work, we shall alone extract his general views or conclusions arising out of the examination of the subject. (*Faber, Orig. Pag. Idol.* i. 16, 17.)

"Adam and Noah were each the father of three sons; and to the persons of the latter of these triads, by whose descendants the world was repeopled, the whole habitable earth was assigned in a three fold division. This truth, though it sometimes appears in its naked and undisguised form, was usually wrapped up by the hierophants in the cloak of the most profound mystery. Hence instead of plainly saying, that the mortal who had flourished in the golden age, and who was venerated as the universal demon father both of

gods and men, was the parent of three sons, they were wont to declare, that the great father had wonderfully triplicated himself.

"Pursuing this vein of mysticism, they industriously contrived to obscure the triple division of the habitable globe among the sons of Noah, just as much as the characters of the three sons themselves. A very ancient notion universally prevailed, that some such triple division had once taken place; and the hierophants when they had elevated Noah and his three sons to the rank of deity, proceeded to ring a variety of corresponding changes upon that celebrated threefold distribution. Noah was esteemed the universal sovereign of the world; but, when he branched out into three kings, (i. e. triplicating himself into his three sons) that world was to be divided into three kingdoms, or (as they were sometimes styled) three worlds. To one of these kings was assigned the empire of heaven; to another, the empire of the earth including the nether regions of Tartarus; to a third, the empire of the ocean, &c.

"So again; when Noah became a god, the attributes of deity were inevitably ascribed to him, otherwise, he would plainly have become incapable of supporting his new character: yet even in the ascription of such attributes, the genuine outlines of his history were never suffered to be wholly forgotten. He had witnessed the destruction of one world, the new creation of another, (rather the regeneration?) and the oath of God, that he would surely preserve mankind from the repetition of such a calamity as the deluge. Hence, when he was worshipped as a hero-god, he was revered in the triple character of the destroyer, the creator, and the preserver, &c. And when he was triplicated into three cognate divinities, were produced three gods, different, yet fundamentally the same, one mild though awful as the creator; another gentle and beneficent as the preserver; a third, sanguinary, ferocious, and implacable, as the destroyer."

In vol. iii. 474, where this subject is again discussed, the reverend author observes, "that the origin of the pagan triads was such as I have supposed it to be, is yet further evident from the circumstance of their being composed of goddesses, as well as gods. As the great father multiplied himself into three sons, so the great mother, in a similar manner multiplied herself into three daughters," &c.

We cannot but regret that the nature and limits of our work prevent a more extended view of this curious and interesting subject, as analysed by Mr. Faber. We apprehend,

however, enough has been extracted, to shew how plausible are his views, and how happily they accord with one of the triune features of the Guatemalan tradition, which has referred to the triple partition of the province of Cerquin, among the three brothers or sons, what properly belongs to the ancient history of the post diluvian world.

The people of Nicaragua and Veragua, appear to have had some other general ideas of the early history of the world; for we find in Herrera, (*Hist. Amer.* ii. 132. iii. 284,) that they surprised the Spaniards by speaking of the deluge, &c. These matters, however, are so slightly mentioned by them, that we cannot make any further use of the facts than the bare quotation.

Notwithstanding the curious and interesting subjects with which this chapter has abounded, we apprehend, there is a circumstance yet to mention, that will excite greater surprise than any other hitherto related; and that is, that the cross, that great symbol of christianity, was worshipped in Yucatan and other parts of America, long prior to the discovery by Columbus.

Though this symbol as an object of superstitious reverence, was observed by the Spaniards in the kingdom of Mexico when that country fell under their dominion, yet we had no such particular description of it, as would have justified our speaking of it in the extensive manner we intend to do at the present time.

The first account in any detail, concerning the adoration of the cross among any aboriginal people of America, is found in Herrera, who has given us the following relation. (*Hist. Amer.* ii. 121.)

At the foot of a temple in the island of Cozumel, Grijalva observed "an enclosure of lime and stone, with battlements and plastered, and in the midst of it a cross of white lime (stone, or marble,) three yards high, which they held to be the god of rain, being very confident they never wanted it when they devoutly begged it of the same. Crosses after the same manner and painted, were found in other parts of this island, and many in Yucatan, yet none of laton or tin, as Gomara writes, but of stone and wood."

When these crosses of Yucatan were first discovered to be revered among the Indians, (A. D. 1518,) they do not appear to have had any tradition concerning the origin of that superstition; for Gomara says, "it could not be known how these Indians came to have so much devotion towards the holy cross, there being no footsteps of the gospel having been ever preached at Cozumel, or in any other part of the Indies."

Nine years after the voyage of Grijalva, however, the following legend was communicated to the Spaniards, according to Herrera, ii. 122.* "In the province of the Tutuxius, (Yucatan) the capital whereof is the town of Mini, fourteen leagues from the place where the city of Merida now stands, the Spaniards were informed, that but a few years before their arrival, a principal Indian priest whose name was Chilam Cambal, looked upon among them as a great prophet, told them, that within a short time, there would come from that part where the sun rises, a white people with beards, that would raise up the sign of the cross, which he showed them, saying their gods would not be able to withstand, but would fly before it, and that those people would subdue the country, doing no harm to such as should peaceably submit to them, and that they would leave their idols and adore one only God, whom those men worshipped, &c. He also caused a stone cross to be made, and set up in the court of the temple, that it might be seen, saying it was the true tree of the world, and abundance of people went to see it as a novelty, and from that time paid a veneration to it," &c.

Though I apprehend, this whole tradition to be an invention of the Spaniards, or a perversion of some ancient recital of the people of Yucatan; yet I have thought proper to make the extract, that the reader might be able as far as I possess materials, to come to a just knowledge of the singular fact under consideration.

I presume, that no one will suppose Chilam Cambal to have been sufficiently inspired, to have foreseen or foretold the events above related of him; though it may with some plausibility be conjectured, that he either directly or indirectly, had acquired some such general ideas from European catholics, that may have been wrecked on the coasts of Yucatan, previous to the discovery of America by Columbus.

I think, however, that as far as Chilam Cambal may be concerned in the history of the crosses of America, that the tradition related by Herrera is entirely unsatisfactory; for according to him (*Hist. Amer.* iv. 165, 7, 8,) he lived but about twenty years before the Spaniards arrived in Yucatan; which is altogether insufficient to explain the origin of the worship of the cross, not only in divers places of Yucatan, but also in the kingdom of Mexico, and in Peru, where Garcilazo de la Vega informs us one was kept in the sanctu-

* Nevertheless, this tradition was either so little known, or esteemed so apocryphal, that Gomara who published his work A. D. 1553, or twenty-six years after the time that Herrera quotes, was either ignorant of it or rejected it as improbable. Herrera expresses some surprise at this omission.

ary of the temple at Cuzco. (*Roy. Comment*, 30.) It is therefore seemingly incredible, that the influence of any few individuals could have extended to such a distance in the short space of twenty years.

The Abbé Clavigero (*Hist. of Mexico*, ii. 14, note) makes the following enumeration of the places at which crosses were found in America, which undoubtedly is short of the real number.* "The crosses the most celebrated, are those of Yucatan, of Mizteca, Queretaro, Tepique, and Tianquiztepec. Those of Yucatan are mentioned by Father Cogoludo a Franciscan, in his History, book ii. chap. 12. The cross of Mizteca, is taken notice of by Boturini in his work, and in the chronicle of Father Burgoa, a Dominican. There is an account of the crosses of Queretaro, written by a Franciscan of the college of *Propaganda* in that city; and of that of Tepique, by the learned Jesuit Sigismund Tarabal, whose manuscripts are preserved in the Jesuit college of Guadalajara. That of Tianquiztepec, was discovered by Boturini, and is mentioned in his work," &c.

As the above authors cited by Clavigero, are entirely beyond my reach, I am unable to state whether they report any tradition concerning these crosses analogous to that of the Yucatanese as related by Herrera. The only use I can make of this enumeration, which it will be seen is of some indirect importance, is to shew the relative situation of the places mentioned, which we will attempt to ascertain in round numbers, from Pinkerton's map. (*Middle Part of Spanish N. A. Dominions*.)

From the city of Merida, (in Yucatan) the country of Chilam Cambal, to Queretaro, the distance is most probably above a thousand miles; but measured by straight lines, it is about nine hundred miles. Queretaro is in lat. $20^{\circ} 45' N.$, lon. $100^{\circ} 10' W.$, and about one hundred miles north from the city of Mexico.

Mizteca, lays in a S. E. direction from Mexico, about one hundred and seventy miles distant.

Tepique, by which I suppose Tepeaca is meant, is about one hundred miles distant from the city of Mexico, in a direction a little south of east.

* There is at least a relieve cross at the ruins near Palenque; for in the largest and most interesting plate to Del Rio's Memoir, one is represented highly decorated in the Indian style, and on each side of it stand two well drawn figures of men, one of whom holds towards the cross a living infant. The hieroglyphic characters represented in our 301 page, are behind this last personage; presumably a priest

There is nothing in the least degree of European style or character in the composition of this singular group.

I have not been able to locate Tianqueztepec exactly; but think, that probably by this Indian name, Teguatepec (N. lat. $16^{\circ} 20'$ and W. long. 95°) is meant, as spelt in our maps. If this should be the place mentioned by Clavigero, it is about five hundred miles distant from Merida, and three hundred and fifty from Mexico, lying as it were in a manner between these two points.

I apprehend, therefore, from the great distances between the respective places mentioned by Clavigero, that the adoration of the cross was a superstition very widely extended throughout Mexico and Guatemala, at a period long anterior to the arrival of the Spaniards in America under the command of Columbus. For it is not only improbable, that such an object would be suddenly received and worshipped by so many different pagan nations almost constantly at war with one another, but it is also unparalleled in the history of the missions of the Roman Catholics in any part of the world; and I cannot believe, that they were in any manner remiss in urging the reception of such an object of veneration and certainly with much greater probabilities of success, than can be acceded to any persons who we may suppose had been wrecked on the American coast.

But by thus carrying the fact of the worship of the cross among the people of Mexico and Guatemala, back into the remote and obscure ages of their history, where every subject is overwhelmed apparently with an impenetrable darkness; is it the less evident, that the superstition was primarily of European origin? For a thousand years previous to the voyage of Columbus, the cross had been an object of religious veneration throughout Christendom; and during that time, numerous instances may have occurred of vessels navigated by Europeans, having been driven by the fury of tempests across the Atlantic ocean to the shores of America. I at once avow, that I should explain the origin of the Guatemalan crosses by such an hypothesis, was I not aware that the same mysterious symbol, was also an object of religious veneration among some of the most renowned nations of antiquity, long anterior to the incarnation of our Redeemer. As I have not been able to find any tradition of European agency in establishing the worship of the cross in America, and as it is an undoubted fact, that it was venerated by the ancient pagans of Asia and Africa prior to the advent, I cannot but pause and hesitate on the question of its origin in America; and especially so, when we consider that the Guatemalan nations, or the Toltecas, or whoever inhabited that kingdom, were certainly the most civilized and enlightened peo-

ple of America, and as far as I can perceive, were little if any-wise inferior to some of those pagan nations of antiquity, with whom the cross was undoubtedly an object of religious or mysterious regard.

But as I am aware, that an opinion which supposes the cross to have been venerated by ancient pagans, irrespective of any communication with christianity, will appear singular to many persons, it will be but fair and proper to inquire more particularly into the history of the crosses of America, and as far as our means permit, to ascertain whether this superstition be indeed so much overwhelmed in the obscurity of time, or so much embarrassed with circumstances of difficult explanation, as to require a solution in the hypothesis of an origin independent of christianity.

Setting aside the prejudice of considering the mere fact of the cross being found in America a proof of its christian origin, I know of no tradition, that either directly or indirectly countenances such a belief; and the Spaniards upon whom the fact made a great impression, have related nothing concerning its history, except the tradition of Chilam Cam-bal which we have already mentioned, and shewed to be futile at least, if it be not also of Spanish invention.

The Spanish priests could frame no other theory on this subject but to suppose that St. Thomas had in the apostolic ages, in some extraordinary manner visited America, and there preached the gospel to the natives. This very arbitrary hypothesis no one can for a moment admit. But the formation of such an opinion by the Spaniards seems to shew almost conclusively, that the aborigines of the country did not retain any traditional history on the subject that would justify the simple belief, that Catholic Europeans had ever possessed influence enough among them to have established so important a feature in their superstitious observances.

Some persons, however, who may have perused the History of Guatemala by Juarros, may consider the account that writer has given us of the antiquities of Copan, to prove that Spaniards or other Europeans, had to a greater or less degree exercised their influence in Guatemala before the voyage of Columbus, and that in this fact, we have a circumstance explaining the origin of the worship of the cross in this kingdom.

This relation of Juarros, which is very interesting, is extremely brief in the description of the particular subjects there represented. We shall in the following extract, furnish the reader with all the information we have been able to collect on these singular antiquities. Copan is situated near the city of Gracias-a-Dios, lat. 15° N. long. 88° 10' W.

Juarros (*Hist. Guat.* 56,) relates, "Francisco de Fuentes, who wrote the chronicles of this kingdom, assures us that in his time, A. D. 1700, the great circus of Copan still remained entire. This was a circular space surrounded by stone pyramids about six yards high, and very well constructed; at the bases of these pyramids, were figures both male and female of very excellent sculpture, which then retained the colours they had been enamelled with, and what was not less remarkable, the whole of them were habited in the Castilian costume. In the middle of this area, elevated above a flight of steps, was the place of sacrifice. The same author reports, that at a short distance from the circus, there was a portal constructed of stone, on the columns of which were the figures of men likewise represented in Spanish habits, with hose, ruffs round the neck, sword, cap, and short cloak. On entering the gateway, there are two fine stone pyramids, moderately large and lofty, from which is suspended a hammock that contains two human figures, one of each sex clothed in the Indian style. Astonishment is forcibly excited on viewing this structure; because, large as it is, there is no appearance of the component parts being joined together, and although entirely of stone and of an enormous weight, it may be put in motion by the slightest impulse of the hand. Not far from this hammock, is the cave of Tibulca," &c.

If we could be certain, that the figures above described were really dressed in the costume of Spaniards, it would tend materially to justify the supposition that the crosses of Guatemala might have been derived from an European source. But though it would be presumptuous in me to deny the fact, I cannot but hesitate to receive it implicitly; for the Spanish writers on America, have been very hasty, and often very inaccurate in making their comparisons. Nothing of a similar kind is elsewhere related by Juarros, Del Rio, Herrera, or Bernal Dias:* which when we consider how puzzled the Spaniards were to explain the history of the Guatemalan crosses, induces me to think, that there exists some mistake in the description of the figures of men and women at Copan, and that Fuentes has assumed for Spaniards, statues or relievos of Indian personages, who in this kingdom certainly wore caps and mantles, though they did not use swords.

But if we admit, that the figures are really those of Spa-

* It may be well to observe, that none of these writers but Juarros, or his author Fuentes, have made any mention of the antiquities at Copan.

niards, I presume the monuments of Copan shew that they were not erected by any independent European influence, but that the artists were subordinate to Indian authority; for the works in question are in the Indian style and manner, and not in that of Europeans, and therefore the fabricators were but mechanics or labourers, and could have enjoyed no very material influence among the natives.

I do not consider it altogether fair to urge negative proofs against the supposition of European agency in the construction of these antiquities, yet we should not altogether neglect their use, and we therefore observe, there is no account of letters being observed among these Indians, nor iron, nor any of those arts, which particularly belong to European civilization. But then again it may be said, that seamen, ignorant of such matters had been wrecked on these shores, who were able to teach the worship of the cross,* and cut stone statutes or relievos; which would designate either their saints, or themselves individually as Europeans among Indians.

Yet the only instance, in which we assuredly know that Europeans were wrecked on the coast of Guatemala, opposes the idea that they ever received even good treatment from the natives. Nor can I conceive, how any individuals arriving in circumstances of distress from the perils of the sea, hungry, thirsty, naked, badly clad, and just escaped with life, should be able afterwards to exercise an influence over the natives, in the manner that the pride of Europeans has generally supposed. It is true, that when such persons arrived in large ships, with fire arms, and other matters of European civilization, they were no doubt at first regarded as a superior race of beings. But this was not the case with shipwrecked mariners, who wanting these imposing appearances, would in other respects be inferior to the Indians themselves; and unless their ships or vessels had been wrecked altogether, or at least rendered unseaworthy, I presume they would never have remained in these unknown regions, cut off from all intercourse with civilized society.†

* Juarros, does not say there was any representation of the cross at Copan.

† The history of Aguilar and his companions, who were wrecked on the coast of Yucatan in attempting to sail from Darien to St. Domingo, and who was delivered from his captivity by Cortez, is extremely valuable in illustrating our observations. In making this voyage, when near the island of Jamaica, the vessel "was cast away on the Alligator shoals, at which time twenty men with much difficulty got into the long boat without sails, bread, or water, and very bad oars. Seven of their crew soon died, and the others landed in a province called Maya, (Yucatan) where they fell into the hands of a cruel cacique, who sacrificed Valdivia, (their leader) and four others, offering them up to his idols and then eating them, keeping a festival. Agui-

With the little information we possess of the antiquities of Guatemala, all I can admit to be proved by the monuments of Copan, supposing they really exhibit European figures, is, that some shipwrecked seamen may have been preserved and protected by some cacique of Honduras, who employed them in carving and ornamenting the circus of Copan, as it is called by Fuentes. But beyond this, I do not see that they have exercised any influence, and it is requiring too much from us to concede that the crosses of Queretaro, nine hundred miles distant, may have proceeded from the influence of a few Europeans at Copan, and where we have no account that the cross enters into the composition of the figures observed there.

We again observe, that if the figures of men at Copan, are really in the Spanish dress, it is, according to all my research on the subject, but an insulated instance: for nothing similar has been described by any Spanish writer, which I presume they would have done were such figures to have been observed elsewhere. Nor would they have failed when speculating on the discovery of crosses in Guatemala, to have explained that fact by so palpable a source of origin. The judicious Herrera, historiographer to the king of Spain, had certainly the very best opportunity of reading and examining the various Spanish writers on America; and yet he mentions no other history of the origin of the cross, but the legend of Chilam Cambal, which he considered more satisfactory than that of St. Thomas, in elucidating the history of that superstition.

I must also observe, that the belief of Europeans being lar and six others, who were shut up in a pen or coop to serve for another festival, resolved to lose their lives some other way, and breaking the cage, fled over the mountains till they came into the dominions of another lord, who was an enemy to the former cacique. This one granted them their lives but made slaves of them. Five of Aguilar's companions soon died through the hardships they endured; he only remaining with one Gonzalo Guerrero, who had married a prime lady of the country by whom he had children; he was then commander for a cacique, and having obtained many victories over his lord's enemies was much beloved and esteemed." He refused to leave the country when sent for by Cortez, according to Aguilar's supposition, "from shame, because his nose, lips, and ears, were bored, his face painted, and his hands wrought, (tattooed) after the manner of the country."

Proceeding in the account of his own adventures, he said, "he had endured very much during the first three years, being obliged to carry wood, water, and fish for his lord, which he performed with much satisfaction to save his life; doing what every Indian commanded him, by which means he gained the affections of them all," &c. "He also was employed in their wars, and had gained the reputation of being considered a prime man in the country," &c. However he took the first opportunity to escape and join his countrymen. (*Herrera*, ii. 173.)

able by their superior civilization to exercise a great influence upon a barbarous people, as far as I can perceive in American history, is not a correct one; or if some partial instances have occurred, though I am ignorant of any such, it will not establish the general fact.*

From every narrative I can remember to have perused, the American Indians when not awed by the appearance of superior force, acted upon the old Roman maxim that "a stranger was an enemy;" for whenever the Spaniards made their appearance on their coasts, they were met with bands of armed men who attempted to repulse them; and it was not until they had experienced, according to a common phrase of Herrera, "the sharpness of the Spanish swords," or heard the report of their fire arms, and experienced the injuries of the shot, that they looked upon the European invaders as a superior race; and even after this knowledge they did not submit peaceably. Thus for a single instance; Cortez would never have been able to have conquered Mexico, though he had with him nearly two thousand European troops,† with artillery, and cavalry, unless he had been also assisted by eighty thousand and more Indians, previously inimical to the Mexican state.

In the relations of the different voyages made to the Pacific ocean, and North West coast of America, we find the various islanders and natives constantly attacking the boats and ships of the European navigators, under all those imposing appearances they are supposed to possess in the eyes of the Indians; as Cook, La Peyrouse, Vancouver, and ensuing voyagers, have abundantly experienced. Can we then believe, that individuals who were dependent on Indian humanity for the very safety of their lives, could have exerted so great an influence among them as to have establish-

* Guerrero, the companion of Aguilar, is said to have gained honour and reputation among the Indians of Yucatan; but how? Not as an European artist, or missionary, but as a brave warrior, who fought like the bravest Indian, and by which he acquired the privilege of boring his ears, nose, and lips. He therefore became one of them, the converse of making them to be like himself. Bernal Días (*Conquest of Mexico*, 35,) has recorded the speech he made to Aguilar, when solicited by him to join Cortez, which is in the following emphatic words. "Brother Aguilar, I am married, I have three sons, and am a cacique and captain in the wars; go you in God's name; my face is marked, and my ears bored; what would the Spaniards think of me if I went among them? Behold these three beautiful boys; I beseech you give me for them some of these green beads, and say that my brother sent them as a present to me from our country."

† Including the forces of Narvaez. (*Clavig. Hist. Mex.* ii. 395.) Of this number many were slain in different battles. But when Cortez undertook the siege of Mexico, his force according to Clavigero, (*Hist. Mex.* iii. 35.) was nine hundred and seventeen Spaniards, and above seventy-seven thousand Indians.

ed a new mode of idolatry, when wanting, as shipwrecked seamen, every advantage belonging to civilized life, and in their destitute condition, inferior to the natives in their means of procuring subsistence, clothing, or shelter. Neither is it an impertinent question to ask, what proportionate number of a hundred sailors, for instance, were ever sufficiently devout to act the part of missionaries even when their situation may have afforded the opportunity? The history of the South sea islands, speaks volumes against the supposition, that either morality or devotion ever attended their visits.*

It is also a matter of some importance, to bear in mind that the Atlantic coasts of Mexico and Guatemala, are the most unlikely parts of all America to which storm driven vessels could be carried; for from the peninsula of Florida to the mouths of the Orinoco, the West India islands with all their keys, rocks, banks, &c., lay in the form of a bow, so as naturally to intercept any vessel that might be forced in this direction from the European coasts.

Yet as I have previously stated, this superstition of worshipping the cross observed in America, would still under every circumstance of perplexity be referred to an European origin, did we not know that this symbol was more or less directly honoured by several pagan nations of antiquity prior to the advent of our Redeemer, to which remarkable fact we must now call the attention of our readers.

It is a circumstance well known to all investigators of Egyptian antiquities, that the cross is constantly represented on their monuments. It is on their obelisks, on the walls of temples, and in the hands of their deities. The amulets, representing beetles and other sacred animals which this superstitious people wore on their necks, are also frequently impressed with this symbol.

The Egyptian cross, is technically known by the name of *Cruz ansata*, or cross with a ring or handle, being commonly represented in this manner, ♀ as if the ring on the top was for a handle.

* Peter Martyr, (*Hackluyt, W. Indies*, 26,) gives us the following account of the companions of Columbus; which I presume, to have been the general character of mariners in that age. "That kind of men which followed the admiral (Columbus) in the navigation, were for the most part unruly, regarding nothing but idleness, play, and liberty, (licentiousness) and would by no means abstain from injuries; ravishing the women of the islands before the faces of their fathers, husbands, and brethren, and by their abominable misdemeanours they disquieted the minds of all the inhabitants, inso-much, that whensoever they found any of our men unprepared, they slew them with such fierceness and gladness, as though they had offered sacrifice to God."

It would be entirely unnecessary for us to enumerate the various monuments where this symbol is to be observed; the general fact is sufficiently well known, and so common is its appearance among Egyptian antiquities, that Jablonski (*Panth. Egypt.* i. 282,) says, "there was no temple, in which the figure of the *Cruz ansata* might not be seen, and which is yet constantly to be observed in the ruins of Egyptian temples. In the Isiac table, the greater part of the gods and goddesses may be seen ornamented with this figure. And that the Egyptian priests were also accustomed to bear it about them, may be seen in the elegant plates of the ROMAN MUSEUM, edited by La Chaussé."

The ancient Phœnician goddess Astarte, the Ashteroth of the Scriptures, is very commonly represented on the Sidonian coins with a long cross in her arms, such as we see the Roman catholics use in their processions. I have copied the following medals, from the few numismatic plates that have fallen under my examination, and which are highly interesting, not only from the prominence with which the cross is represented, but also from the circumstance, that we have the dates on the medals, by which we can ascertain their exact age.



No. 1, is dated 25th year of the Selucidæ, which commencing 312 years before Christ, shews this coin to have been struck B. C. 287 years. In like manner we ascertain the date of No. 2, to be B. C. 282; and No. 3, B. C. 122.* No. 1 and 2 are from Pellerin, *Med. des Villes et de Peuples*, plate lxxxii. No. 3, is from Pellerin, *Med. des Rois*, plate xii.

* It may be a satisfaction to some of my readers to be informed, that the dates on these coins are to be read according to the Greek system of notation, thus on No. 1 are the letters L.EK. The L signifies year (*Λυχαδας*) E is 5, K is 20; i. e. year 25. No. 2 is read in the same manner, L year, A 30; i. e. year 30. No. 3, has the word year represented by E, the initial letter of *Ετος*, and the number is q p, the first expressing 90, and the latter 100; in other words, year 190. These dates deducted from 312, the era of the Selucidæ, gives the year before Christ.

The following medal was struck at Sidon in the reign of Aurelius. Astarte is here represented standing in a temple and elevating a long cross. See *Well's Sac. Geog.* SIDON.



Astarte is represented on the coins of other cities, in a similar manner with the long cross. See *Well's Sacred Geog.* Berytos, No. 9. Bostra, No. 14. Cæsarea Libani, 1 and 2, &c. Other instances may be seen in Calmet, Pellérin, &c.

In Hindostan, the figure of the cross was so far venerated that temples were sometimes built in that form, as those ancient ones of Benares and Matra. (*Maurice, Anct. Hind.* i. 249.) In the island of Java according to Raffles, (*Hist. Java*, 19,) there are also ancient Hindu temples built in the form of a cross.

The Druidical temple at New Grange, is also constructed in this mystic form. (*Faber, Orig. Idol.* iii. 267.)

"It is a fact not less remarkable than well attested," says Mr. Maurice, (*Indian Antiq.* vi. 68,) "that the Druids in their groves, were accustomed to select the most stately and beautiful tree as an emblem of the deity they adored; and having cut off the side branches, they affixed two of the largest of them to the highest part of the trunk, in such a manner as that those branches extended on each side like the arms of a man, and together with the body presented to the spectator the appearance of a huge cross; and on the bark in various places was actually inscribed the letter **+** On the right arm was inscribed Hesus, on the left, Belenus, and on the middle of the trunk, Tharanis."

Maurice (page 108,) quotes Borlase, and the express authorities which he adduces for the truth of this fact.


From Gen Valancey, (*Collect. Hiber.* v. 109,) it appears, that the symbol of intellectual wisdom among the old Irish, was in the form of a cross, or as that antiquary observes, "in the form of the Egyptian Tau," which very letter is the ba-

sis of the *Crux ansata*. The cut he has given us of the Irish symbol, is a perfect cross in every particular.

Concerning these ancient pagan crosses, we have some very curious and interesting information to communicate. At a very early period after the gospel had been preached in Egypt, the attention of the christian priests was sensibly excited by frequently perceiving that symbol, connected with the various monuments of that idolatrous land. When some Egyptian priests who understood the hieroglyphic characters were converted to christianity, they made the following communication. (*Dr. E. D. Clark, Travels in Egypt, &c.* iii. 72, 73.) "The converted heathens, says Socrates Scholasticus, explained the symbol, and declared that it signified 'LIFE to COME.' This same fact is also mentioned by Rufinus, Heliod. Æthiop. Sozomen, &c."

Dr. Young (*Recent Discov. in Hierog.* 156,) has in his specimen 108, given it the more limited signification of LIFE; at which I feel some surprise, considering the preceding information was derived directly from Egyptian priests who understood the hieroglyphic characters.

Mr. Champolion (*Precis du Syst. Hierog.* No. 277,) says it signifies LIFE, or more properly DIVINE LIFE, "*la vie, et plus proprement la vie divine.*"

Simple crosses, or those without the ring or handle  continually occur among the Egyptian hieroglyphics. Mr. Champolion in the explanation of a remarkable plate of hieroglyphical characters, (*Precis, &c.* 191,) says, it there signifies *avenger*. In this instance it is applied to the god Orus or Horus, the avenger of Osiris slain by Typhon the evil principle. See also, No. 348 of the plates of the second volume, where it is stated to signify *supporter* or *saviour* "*soutien ou sauveur.*"

I have not been able to procure the least information concerning the nature or meaning of the long cross borne by Astarte on the Sidonian medals. It is, however, far from being unlikely, that the emblematical or mysterious signification of the *crux ansata*, was attached to it; and very possibly, the Egyptian figure is but an abridgement of the one used by Astarte.

I apprehend that the ancient Jews or Arabians, entertained a most mysterious notion of this symbol, which will go far towards establishing the great antiquity of the superstition of venerating this object in the eastern continent, for neither Jew nor Mahometan can be supposed to have originated such an idea since the christian era. The information I have upon this subject is derived from Shaw, (*Travels in Barbary and*

the Levant, 405,) who has made the following extract from Kircher, *Obel: Pamph.* p. 440; a work I have never seen. "Figuram crucis, in cujus capite circulus in modo ansæ, accepit Mesra (*Misraim*) a Chamo, et Cham a Noe et Noe ab Enoch, Enoch ab Seth, Seth ab Adamo, Adam ab angelo suo Raziel. Cham vero ope ejus fecit mirabilia magna et ab eo accepit Hermes, et posuit eum inter literas avium; est autem hic character signum processus motusque spiritus mundi: et fuit magicum sigillum et secretum in telesmatis eorum, et annulus contra demones et malignas potestates. (Abeneph:)"

I am unable to state who this person was whose name is abridged in the above quotation, (Abeneph:) or whether he was a Jew or Arabian, but I presume he was a cabalistic Jew. The literati of Europe, to whom Kircher's works and the authors to whom he refers are accessible, can easily ascertain; my ignorance of all these particulars, prevents my using the information contained in the extract but in the most indirect manner.

If this writer (Abeneph:) was a christian, his declaration, unless supported by respectable ancient authorities cannot be deemed of any importance. But if he was a Jew or a Mahometan, I apprehend, it is of great moment: for I cannot conceive that either the one or the other would have invented a tradition, which indirectly at least, honours the great symbol of the christian faith, and that through the hands of some of the most illustrious personages of Jewish history, until it is derived from an angelic, or divine source.*

If therefore Abeneph: be a Jew or Mahometan, I consider the tradition he has related, to be one entertained among the ancient people of his race prior to the advent, and however it may be now involved in an extravagant tradition, it testifies that the sign or symbol of the cross, was held by them in the remotest times as an object of great and mysterious signification.

But however we may err concerning the authority of this writer, the fact itself is undoubtedly established by the history of the Egyptian monuments, and the inspection of the Sidonian medals; both of which remount to centuries before the advent of our Redeemer.

We presume, we have now shewn sufficient reason, to justify our hesitation concerning the crosses of Yucatan and

* The Talmudic Rabbis (*Purchas Pilg.* v. 178,) says, "that when Adam was exceedingly dejected with remorse of his sin, God sent the angel *Raziel* to tell him, that there should be one of his progeny which should have the four letters of Jehovah in his name, and should expiate original sin."

Mexico, whether they were of christian origin or whether they were not connected with the earliest system of postdiluvian idolatry; with which we have in certain instances undoubtedly shewn, the demi-civilized people of America have had a direct and immediate participation.

But whence was this symbol derived among the pagans of antiquity, which signifies, emblematically or metaphorically, LIFE, LIFE TO COME, SAVIOUR, KNOWLEDGE OR WISDOM, A TALISMAN AGAINST EVIL SPIRITS, &c.? The mind is apparently bewildered in a maze of conjectures. In a future page, we shall again resume the consideration of this subject, when other matters arising out of our general inquiry will enable us to investigate the fact with greater advantage than is afforded at the present time; and during the interval we leave the question without prejudice, to the meditation of the reader.

On the Origin of the Civilization of the People of Guatemala.

We have now mentioned every particular concerning the history of the Guatemalan nations, according to our materials, that seemed either necessary in establishing their national character as a demi-civilized people, or as elucidating those curious subjects which have been observed to be connected with their history and institutions. Every part of our examination has tended to shew, that generally speaking, they were superior to any other aboriginal people of our continent, and this circumstance gives rise to the following query: Are we to consider their civilization as having been derived from the Toltecks? or may there not have been other demi-civilized people in this part of America, anterior to, or coeval with that celebrated nation, and who independent of them communicated a certain light of science and arts to both Mexico and Guatemala.

The traditions of these latter people, as far as we have been able to examine them seem to point out an evident connection with the history of Mexico; and the times in which they are reported to have emigrated to the different provinces of Guatemala, accords with the Mexican tradition of the time when the Toltecan monarchy in Anahuac was dissolved, and their population dispersed among the adjoining nations.

Their system of astronomy was also used in Guatemala, and I presume their form of idolatry also, as appears from certain incidental notices given in the writings of Herrera, Juarros, &c.

As respects their languages, we are unable to speak, having no information whereby we can make the comparison.

In their hieroglyphic system, some of the Guatemalan nations at least, were much superior to the Mexicans, whom we consider to have derived their knowledge from the Toltecas in that particular.

In the mechanical arts exercised in the two kingdoms of Mexico and Guatemala, we may suppose a great similarity; yet I believe there are no architectural monuments of the former country, comparable either in number or magnitude, with those of the latter; and it is evident, that the further south we go from the city of Mexico towards Guatemala, the ancient monuments appear to be of superior workmanship; such, for instance, are the fort or monument of Xochicalco, the palace of Mitla, &c. The people also of the southern provinces of Mexico, appear more ingenious and polished than those of the proper land of Anahuac, as may be inferred from the partial accounts we have received of the people of Oaxaca, Mizteca, Tarasca, &c.

Now, are all these appearances of demi-civilization to be explained by the supposition, that when the Toltecan monarchy was dissolved according to the Mexican tradition, that the remains of that demi-civilized people, emigrating in an easterly direction as far as lake Nicaragua, imparted the knowledge of their science and arts, to the various people with whom the individuals of their nation may have found protection and hospitality?

I confess myself embarrassed to give a decided opinion; for though the Toltecan monarchy was dissolved according to Mexican antiquities, A. D. 1051, which would allow five hundred years between that event and the conquest of Guatemala by the Spaniards, (A. D. 1524,) still I apprehend that small numbers of such emigrants would not be able to induce the ruder tribes with whom they may have taken refuge, to adopt habits or institutions different from their own.

Such an hypothesis will also require a much greater population for the Toltecan monarchy than we can readily admit: that is, if we suppose them to have been the original stock of the Quichés and the Tutuxius of Yucatan, and the nucleus of the population of Chiapa and Nicaragua, all of whom have traditions that seemingly refer their origin to the kingdom of Mexico.

We must also remember, that the Olmecs, and Xicalancas, the Miztecas, Zapotecks, &c. of the kingdom of Mexico, are considered by many writers to have been settled in that region prior to the arrival of the Toltecs, and which people were also demi-civilized.

I am inclined therefore to believe, that in times more re-

mote than those attributed to the Toltecas, the southern part of the now kingdom of Mexico, and the more northern parts of Guatemala, were inhabited by several demi-civilized people, possibly of different tribes, but who for aught we know, may not have been greatly dissimilar to the Toltecs in their kind and degree of civilization.

The Tolteck empire in Anahuac, being but one of the demi-civilized nations of Mexico and Guatemala, may have been dissolved in the manner we have related in our chapter on Mexico, and the remains of their population may have been dispersed among the adjoining nations, especially those lying to the eastward. But I am disposed to doubt, that the Guatemalan traditions, which derive their original from that kingdom, were synchronical and dependent upon that event. That they came from the kingdom of Mexico immediately into Guatemala, is I presume, an undoubted fact; but in this reference to Mexico, it should be considered only as synonymous with saying, they had emigrated from a more westerly or northern country: and this may have been done long prior to the settlement of the Toltecs in Anahuac. The Quichés, it will be remembered, said, they had emigrated from that country during the most flourishing times of the Toltecas, and that they had previously accompanied them in their emigratory march from that unknown northern region concerning which we have already spoken in our preceding chapter.

The periods of time about which the emigrations to Guatemala were made, according to the relation of the Spanish historians, are however certainly in favour of a Toltecan origin; but I cannot consider them conclusive, though I have no direct authority to urge against the statement. Nor would the fact have been questioned, did I consider that the civilization of the Guatemalans could be fairly derived from the Toltecas alone, after the period of the downfall of their empire, and under those circumstances of calamity with which that event is said to have taken place. It appears more natural to believe, that other nations, prior to, or coeval with them, had been established both in Mexico and Guatemala, whose demi-civilization, though probably different in certain particulars from theirs, was yet, on the whole, not very dissimilar. By this opinion, certainly not unpalatable, we can reconcile every difficulty connected with the history of the two kingdoms, which I apprehend cannot be easily done, if we consider the Toltecas the only source of the demi-civilization that prevailed in these parts of America.

But having made my exceptions to the common opinion,

I shall leave the subject to the examination of others, who may feel a sufficient interest in the study of Toltecan antiquities to make an investigation for which I have neither time, nor books, nor opportunity of research.

With this chapter terminates the Toltecan history, for we have not been able distinctly to trace them further eastward or southward. Neither the Muyscas of Colombia, nor the Peruvians, appear to have had any communication with this part of America. Even Comagre,* a cacique on the isthmus of Darien, appears to have been more connected with South America; for it was from him that the Spaniards first heard of the wealth and dominion of the Peruvian Incas, soon destined to fall under the atrocious invasion of Pizarro.

It may be, however, that Tolteck civilization extended into South America; and, perhaps, the Chancas of ancient Peru, (*Garc. de la Vega*, 115, 177,) and the Panoes of the modern kingdom, (*Humboldt*, *Res.* i. 174,) proceeded from that stock, but this is indeed a bare conjecture. Garcilazo (*Roy. Comment.* 7,) also says, that "Indians from Mexico had come in past times, and spread themselves from Panama and Darien over those great mountains which run as far as cape St. Martha." He seems here to refer to Blas Valera as an authority, but it is not clearly expressed. There is seemingly an etymological confirmation of this statement, in reference to the Toltecas, by our perceiving on the maps a district and town named *Tolu*; situated about half way between the gulf of Darien and Carthagená; and there is also a *Tola*,

* Comagre and Acla, of whom we have promised some account in a former page, were two petty chiefs of small territories on the isthmus of Darien, about 120 miles east of Port Bello. At the time they were first discovered by the Spaniards, which was before they knew any thing of Mexico, Guatemala, or Peru; their degree of civilization made a considerable impression on these invading banditti. We must infer what advances they had made from barbarism, by the following account that Herrera (*Hist. Amer.* ii. 6,) has preserved of the palace of Comagre.

"This palace was one hundred and fifty paces in length, and eighty in breadth, founded on very large posts, enclosed by a stone wall with timber intermixed at the top, and hollow spaces, so beautifully wrought, that the Spaniards were amazed at the sight of it. There were in it several chambers and apartments, and one that was like a buttery was full of such provisions as the country afforded. There was another large room like a cellar, full of earthen vessels containing several sorts of white and red liquors made of Indian wheat, (maize) roots, a kind of palm-tree, and other ingredients; the which liquors the Spaniards commended when they drank them. There was also a very large chamber kept very private, in which were the bodies of many dead men, dried up, hanging by cords made of cotton, clothed, and covered with rich mantles of the same interwoven with gold and some pearls and stones, that were valued among them. These bodies were those of their parents, ancestors and relations, whom Comagre highly respected; they were parched at the fire that they might be preserved without corruption."

on the Pacific side of the continent, in about 1° N. lat. As these names have been applied by the Toltecas, or a kindred people, to several cities in Mexico and Guatemala, it is a circumstance not unworthy of mention, when we again meet them elsewhere.

The Indians in the vicinity of St. Sebastians, east side of the gulf of Darien, said, they had originally come from the country beyond the great river of Darien, (the Atrato.) Herrera (*Hist. Amer.* i. 348,) says, "their women were well dressed, and that there were some great merchants among them."

CHAPTER VII.

OF THE MUYSCAS OF COLOMBIA.

AMONG the lofty and abrupt mountains of the northern parts of the now Republic of Colombia, formerly resided at times long anterior to the discovery of America by the Spaniards, several demi-civilized people known by the appellations of Moscas or Muyscas, Guanes, Calimas, Panchas, &c.; whose government, polity, and religious institutions, were subverted and destroyed at an early period of European-American history.

How far the influence of their institutions and religion had reached, we are now, from an entire defect of materials, unable to state; yet it is most probable, they were very widely extended, for rumors and indications of their comparative civilization, had reached the Spanish settlements both on the shores of the Atlantic and Pacific oceans; and induced several military invasions of their country at the very same period of time.

After the conquest of Peru, an Indian was made prisoner by Belalcazar, governor of the province of Quito, who said he belonged to a kingdom lying to the N. E., called Cundinamarca, (*Herrera*, v. 15,) which was governed by a powerful prince, who had sent him ambassador to Atahualpa the last Inca, and in whose dominions he had ever since remained in consequence of the civil wars that had just previously agitated Peru. From this information, no doubt supported by other indications, Belalcazar, immediately set on foot a military expedition against the then mountaineers of New Grenada.

At the same time, Gonzales Ximenes de Quesada, with a considerable force, landed at the mouth of the river Magdalena, and commenced exploring the country through which this river descended. He first reached Bogota, Tunja, and other establishments of the Muyscas, and may in an especial manner be considered their conqueror.

From Venezuela, an expedition was also fitted out under the command of one Federman, who led by exaggerated reports of adjacent Indians, marched with a third band of ruffians into the country of the Muyscas.

Thus, from three different directions were invasions made into the mountainous districts of Colombia, and the hapless

inhabitants, soon found their country ravaged, their temples and the tombs of their forefathers violated, and their government, social institutions, and religion, overwhelmed and destroyed.

These cruel and brutal invaders, not only subverted the polity and religious institutions of the country by the massacre of the inhabitants, and the imposition of a galling yoke; but they further wantonly mutilated and destroyed such things as they could not understand; and matters highly curious and interesting have perished by their not having even a vile scribe with them, to record the progress of their marches and daily villanies.

From this circumstance, we are obliged to speak in general terms of the different people of this country, and to infer the state of their civilization from some few particulars, especially derived from the history of the Muyscas.

From the relation given by Herrera, (*Hist. Amer.* v. 66 to 91,) we are enabled to infer their claim to an imperfect civilization perhaps not inferior to that of the Peruvians; with whom, however, they appear to have no common features of resemblance; and from the researches of Baron Humboldt we derive certain particulars of their astronomy and religion of a highly interesting kind, which we shall relate in due order.

We learn from Herrera as above quoted, that when Quesada first ascended the elevated plain of Bogota, the people there were clothed with black, white, and coloured mantles of cotton cloth, some of the women wearing cotton caps, and others net coifs.

Their houses were built of timber and thatched; those of the chiefs, were "like castles, with several enclosures about them like a labyrinth, having large courts, with mouldings, and paintings." (*Herrera*, v. 87.)

They cultivated maize, yucca, pignuts, which they called yomas, and turnips, called *cubias*,* which they dress with meat. (*Herrera*, v. 87.) They also raised quinoa, (*chenopodium*) frequently denominated rice by the early Spanish writers.

Salt, was manufactured by them into large loaves from saline springs in the mountains, and with which article, a great traffic was carried on with adjacent tribes. (*Herrera*, *Hist. Amer.* v. 73.)

They cured meat with salt, which is the one of the few instances of such a practice that I have met with in my in-

* As the common potato, (*solanum*) was certainly cultivated by these mountaineers, I think it not improbable this was the root signified.

quiries on the nations of this continent. Herrera (*Hist. Amer.* v. 77,) says, Quesada found "many sides and large pieces of venison, dried with salt."

They wrought gold into plates and various ornaments, such as collars, rings, bracelets, idols, crowns, animals of all kinds; and they cut emeralds and other hard stones, into various shapes and figures.

Golden idols are yet occasionally found on the elevated plain of Bogota. Hamilton (*Travels in Colombia*, i. 199,) relates, that sixty small idols of gold, were recently discovered in ploughing a field. The same writer, vol. ii. 239, also mentions the discovery of an ancient Indian ring made of platina, which we must suppose, had been beat into shape from a piece of that metal found in a virgin state.

Their military weapons were pikes, made of hard wood thirty spans in length; macanas, darts, slings, bows and arrows. They threw darts by means of slings, and also with the *estolica*, or hand board. (*Herrera*, v. 86, 381.)

They marched in good order, and manœuvered well in time of battle. (*Herrera*, v. 81.)

Their kings, and high priests, were treated by the people with the greatest respect and submission, even approaching them backwards, &c. (*Herrera*, v. 88.)

"In point of morality," says Herrera, "these Indians were rational enough, punishing crimes, particularly murder, theft, &c. There are many gibbets along the roads."

They were very observant of the precepts of their religion, and had temples not only in their towns and villages, but numbers of little chapels or oratories on their roads, with golden or wooden idols placed in them. They also had consecrated woods, and lakes, where they made sacrifices.

The sun and moon, according to Herrera, (*Hist. Amer.* v. 90,) were looked upon as the universal creators: but besides these, a multitude of idols were worshipped, to whom also temples were dedicated.

There are some other particulars, that may be gleaned out of the history of Herrera concerning these people, which would further establish their claim to a certain degree of demi-civilization, but which we shall not extract, as we have more interesting matters to relate of them from the researches of Baron Humboldt. He was fortunate enough, to ascertain from the inquiries of an intelligent priest of that country, some of the leading features of the ancient Muysca theology, and their calendar arrangement of time, which we shall now lay before our readers in large extracts.

The following tradition, Humboldt appears to have taken

from Piedrahita's history of New Grenada, a work composed from certain manuscripts of Quesada, whom we have already noted as the principal conqueror of the Muyscas, and other people inhabiting the mountainous parts of Colombia. As I have never been able to procure a copy of this work, I must quote it at second hand from Humboldt's Researches, i. 74.

"In the remotest times before the moon accompanied the earth, according to the mythology of the Muysca or Mozca Indians, the inhabitants of the plain of Bogota lived like barbarians, naked, without any form of laws or religious worship. Suddenly appeared among them an old man, who came from the plains situate on the east of the Cordillera of Chingasa, and who appeared to be of a race unlike that of the natives, having a long and bushy beard. He was known by three distinct appellations, Bochica, Nemquetheba, and Zuhé. This old man, like Manco Capac instructed men how to clothe themselves, build huts, till the ground, and form themselves into communities. He brought with him a woman, to whom tradition also gives three names, Chia, Yubecayguaya, and Huythaca. This woman, extremely beautiful and no less malignant, thwarted every enterprize of her husband for the happiness of mankind. By her skill in magic, she swelled the river of Funzha, and inundated the valley of Bogota. The greater part of the inhabitants perished in this deluge; a few only found refuge on the summits of the neighbouring mountains. The old man, in anger, drove the beautiful Huythaca far from the earth, and she became the moon, which began from that epoch, to enlighten our planet during the night. Bochica, moved with compassion for those who were dispersed over the mountains, broke with his powerful arm the rocks that enclosed the valley on the side of Canoas and Tequendama. By this outlet he drained the waters of the Lake of Bogota. He built towns, introduced the worship of the sun, named two chiefs, between whom he divided the civil and ecclesiastical authority, and then withdrew himself under the name of Idacanzas, into the holy valley of Iraca, near Tunja; where he lived in the exercise of the most austere penitence, for the space of two thousand years."

"The same traditions also relate (*Humboldt, Res. ii. 108,*) that Bochica, who had established himself high priest of Sogamozo or Iraca, seeing the chiefs of the different Indian tribes disputing for the supreme authority, advised them to choose for *zaque* or sovereign, one among them named Huncahua, revered on account of his wisdom and justice. The

advice of the high priest was universally adopted, and Huncahua, who reigned two hundred and fifty years, subdued the whole of the country that extends from the Savannahs of San Juan de los Llanos, to the mountains of Opon. Bochica, devoting himself to a life of severe penance, lived a hundred Muysca cycles, or two thousand years. He then disappeared mysteriously at Iraca, to the east of Tunja. This town, which was then the most populous in the country, was founded by Huncahua, the first of the dynasty of the Zagues of Cundinamarca, and took the name of Hunca, from its founder, which the Spaniards afterward changed to that of Tunca or Tunja.

"The form of government given by Bochica to the inhabitants of Bogota, is remarkable from its analogy with those of Japan and Thibet. At a period probably anterior to Manco Capac, Bochica constituted the four chiefs of tribes, Gameza, Busbanca, Pesca, and Toca, electors, and ordered that after his death, these electors and their descendants should have the right of choosing the high priest of Iraca. These pontifs or lamas, the successors of Bochica, were considered as heirs of his virtue and sanctity, and the people thronged in crowds to offer presents to the high priests of Iraca, visiting those places which were consecrated by the miracles of Bochica, and amidst the horrors of the most sanguinary warfare, the pilgrims enjoyed the protection of those princes through whose territories they passed to visit the sanctuary, (chunsua) and prostrate themselves at the feet of the lama who presided there. The temporal chief called Zaque of Tunja, to whom the Zippa or princes of Bogota paid an annual tribute, and the pontif of Iraca, were consequently two distinct potentates, as the emperor and dairi are in Japan."

Baron Humboldt, makes the following observation upon the history of Bochica, in which we cannot concur though we deem it proper to extract his words. "This Indian fable, which attributes the cataract of Tequendama to the founder of the empire of the Zaque, contains a number of peculiarities, which we find scattered in the religious traditions of several nations of the old continent. The good and evil principle, here seem to be personified in the old man Bochica, and his wife Huythaca. The remote period when the moon did not exist, reminds us of the boast of the Arcadians on the antiquity of their origin. The planet of the night is represented as a malignant being, augmenting the humidity of the earth, while Bochica, child of the sun, dries the soil, promotes agriculture, and becomes the benefactor of the

Muyscas, as the first Inca was that of the Peruvians." (*Humboldt, Res. i. 75.*)

Far from seeing such refined allegories as those alluded to by Baron Humboldt in the preceding extract, I think, we may recognize a confused account of those events that belong to the common history of all nations, and which are related by the greater part of them with more or less accuracy. In the Muysca tradition, we find a *woman*, represented as having been the cause of preventing the "happiness of mankind;" and consecutively, producing a *deluge*, in which the human race with the exception of a few individuals, are supposed to have perished. Bochica, delivers this small remnant from impending destruction, remodels human society, instructs them in the various arts of social life, imparts to them a religious system and political form of government, and having accomplished this work, he mysteriously disappears.

Here, then, we have one of those almost universal traditions of the early history of man, which alone declared explicitly in the Bible, is yet, in a corrupted manner preserved among most of the nations of the earth. The particulars related by the Muyscas are few, yet they are certainly the same with those events related of Saturn, Xisthurus, Quetzalcoatl, and various other hero divinities, who all act a similar part with Bochica, in remodeling human society escaped from a deluge; and like him, the two last also disappear suddenly, after the accomplishment of benevolent acts.

Huythaca, was not a symbol of the evil principle among the Muyscas, as will be seen in an extract we shall hereafter introduce from Baron Humboldt. This evil being was known to them as the demon *Fomagata*, who was figured with one eye, four ears, and a long tail.

We shall also find that Bochica had three heads, like the Trimurti of the Hindoos, being a triplicated deity, who nevertheless formed but one divinity. This feature, it will be found, characterizes in an especial manner the patriarch Noah, according to the mythological fictions of many ancient nations of Asia, who represent him triplicating himself in his three sons. This fact has been very ingeniously substantiated by Faber in his *Origin of Pagan Idolatry*: but as we have already introduced his observations on this subject, in our account of the Guatemalan nations, the reader will please refer back to page 320.

Bochica, was not only considered the lawgiver and founder of the religious system of the Muyscas, but to him was at-

tributed the invention of that peculiar calendar arrangement of time, of which we are now about to speak.

This system, which appears to have been unnoticed among the Spanish writers of South America for a long series of years, has been fortunately recovered some few years back, by Mr. Duquesne,* an ecclesiastic of Santa Fe de Bogota, whose memoir upon this subject, was communicated to Baron Humboldt while at that capital in A. D. 1801, and who has given us a detailed view of it in his *Researches*, ii. 104. As we have no other knowledge concerning this calendar, than what we have derived from the writings of that learned traveller, we shall introduce his account and observations upon it, in the present chapter, simply throwing them into a form more analogous to our plan, and omitting such parts as manifestly have no connexion with the subject under consideration.

The least division of time among the Muyscas, was a period of *three days*, on the first day of which, a great market was held at Turmequé.

Ten of these periods constituted a lunation, or period called *suná*, which means *high road, paved road, or dyke*, because a sacrifice was celebrated every month at the time of full moon in a public place, to which in every village the high road (*suná*) led, from the house of the chief of the tribe.

Twenty sunas, composed the *zocam*, or period used by these people in their ordinary civil concerns.

The *zocam*, or period of the priests, contained *thirty-seven sunas*, and twenty periods of the priests, formed a *Muysca cycle*.

Besides these two periods, they used a rural year of twelve or thirteen *sunas*, which was reckoned from one season of rains to another.

In order to distinguish the days, *sunas*, and *zocams*, the Muyscas made use of a periodical series, the ten terms of which were numbers. These numbers in the Chibcha tongue, which is the name of the Muysca language, are *Ala* one,

* Mr. Duquesne, who was a native of the kingdom of New Grenada, "was long the vicar of an Indian village situate on the plain of the ancient Cundinamarca. His office having enabled him to gain the confidence of the natives, who are descendants of the Muyscas, he has endeavoured to collect all that tradition has preserved during three centuries, concerning the state of those regions before the arrival of the Spaniards in the New Continent. He succeeded in procuring one of those sculptured stones, by which the Muyscas regulated the division of time, and he acquired the knowledge of the simple hieroglyphics which denote both numbers and the lunar days," &c. (*Humboldt, Res. ii. 105.*)

Bosa two, *Mica* three, *Muyhica* four, *Hisca* five, *Ta* six, *Cuhupqua* seven, *Suhuza* eight, *Aca* nine, *Ubchihica* ten.

Mr. Duquesne, the Spanish priest from whom Humboldt derived all his information upon the Muysca calendar, asserts that all the Chibcha words for numbers, as far as we have quoted them, are all significant; depending on roots which relate either to phases of the moon in its increase or wane, or to objects of agriculture and worship. The curious reader will find them explained in Humboldt's *Res.* ii. 119.

It is a very singular fact, however, that these numbers were expressed by characters that are clearly cyphers, as may be seen on the engraving of the calendar stones of the Muyscas, represented in Humboldt's *Researches*, ii. 104, to which we must refer the reader, from our inability to risk the expense of having them engraved for this work. We may observe, however, that they bear no analogy to the Hindu or Arabic numeral characters.*

We shall now proceed to explain, as far as we are able, the manner in which the Muyscas applied their ten numeral cyphers, to the different parts of their calendar.

We have already observed, that the smallest period of the Muyscas was *three days*, and that ten such periods, constituted their *suná*.

"The *suná*, did not begin at the new moon, as among the greater part of the nations of the old world, but on the day after the full moon. The words *ata*, *bosa*, *mica*, &c. and their graphic signs, arranged in three periodical series, were made use of to denote the thirty days of a lunation, so that *mica*, like the *quartidi* of the French republican calendar, was the 4th, 14th, and 24th day of the *suná*. The same custom was observed among the Greeks, to distinguish whether the number belonged to the *month beginning*, *middle of the month*, or the *month ending*. As the small festivals or market days returned every three days, each during the course of a Muysca month was governed by a different sign; for the two periodical series of *three* and *ten*, have no common divisor, and can coincide only after three times ten days, as may be seen in the following table, in which the market days are distinguished by italic letters." *Humboldt Res.* ii. 124.

* Baron Humboldt (*Res.* ii. 142,) conjectures, that the ten hieroglyphics *Ata*, *Bosa*, *Mica*, &c. originally marked like the signs of the Mexican days, the division of a zodiac into ten parts, and that the numerical words *ata*, *bosa*, &c., were substituted for the names of signs only to indicate the first sign of the zodiac, the second sign, the third sign, &c. and that this substitution has insensibly given rise to the extraordinary idea, that the numbers themselves were significant.

TABLE

Representing the days of the Suna, divided into ten small periods of three days. (Humboldt, Res. ii. 126.)

FIRST SERIES.	{	Ata.
		Bosa.
		Mica.
		Muyhica.
		Hisca. /
		Ta.
		Cuhupqua— <i>last quarter of the moon.</i>
		Suhuza.
		Aca.
	{	Ubchihica.
SECOND SERIES.	{	Ata.
		Bosa.
		Mica.
		Muyhica.
		Hisca— <i>conjunction.</i>
		Ta.
		Cuhupqua.
		Suhuza.
		Aca.
	{	Ubchihica.
THIRD SERIES.	{	Ata.
		Bosa.
		Mica— <i>first quarter.</i>
		Muyhica.
		Hisca.
		Ta.
		Cuhupqua.
		Suhuza.
		Aca.
	{	Ubchihica— <i>full moon.</i>

“The *Sunas*, had no peculiar denomination as we find among the Egyptians, Persians, Hindoos and Mexicans, they were distinguished only by their number.”

Twenty *sunas*, formed the ordinary zocam, (or period) by which the Muyscas regulated their civil concerns. And twenty zocams, (or periods) of the priests, each containing thirty-seven *sunas* constituted the Muysca cycle, which seems to indicate the existence of the cycle of sixty years according to Baron Humboldt, which he says, (*Res. ii. 128,*)

is equal to the seven hundred and forty *sunas* contained in the Muysca cycle.*

The *zocam*, or *period of the priests*, was an astronomical cycle containing thirty-seven *sunas*, by which they regulated their religious festivals. It is in reality three rural years, of which two contain twelve *sunas* each, and the third thirteen *sunas*, embracing in all, 1110 days, which exceeds three vague years by nearly 15 days.

"Though the rural year was reckoned to be composed of twelve *sunas*, the priests added, unknown to the people, at the end of the third year, a thirteenth month, analogous to the *jun* of the Chinese. The table we are about to lay down, proves that by the employment of the periodical series, this intercalary suna was governed in the first instance by *cuhupqua*. It is this sign which is called the *deaf moon*, because it did not count in the fourth series, which without the use of a complementary term, should have commenced not by *suhuza*, but by *cuhupqua*."† This will be better understood when we observe, that the Muyscas did not reckon in their three calendars, rural, civil and religious, as far as 12, 20, or 37: they employed for the *sunas* themselves, as well as for the days of the *suna*, only the ten numbers and their hieroglyphics. Thus the first month of the second agricultural year, was governed by the sign *mica*, (three) the third month of the third year by the sign *cuhupqua*, (seven) and the rest in like manner." (*Humboldt, Res. ii. 127, 128.*)

* If the *Muysca cycle* was intended to constitute a period of sixty years, it is a very gross attempt; for 740 *sunas*, amount to 22,200 days; whereas an astronomical cycle of 60 years is not quite equal to 21,915 days; and one composed of vague years, is equal but to 21,900 days. The *Muysca cycle*, therefore, exceeds the first by 285, and the latter by 300 days.

It is possible, however, that they may have omitted to intercalate certain *deaf sunas* at particular times, but on this point, we have no information. Or it may be, that their cycle is but an attempt to recover a mode of computation used by a more civilized age or people, whose correct features had been lost.

We have every reason to think, that the cycle of 60, or the half of 120 years, was at least of the earliest postdiluvian use. See our observations on the Mexican astronomy, page 217.

† "This mode of intercalation, which is found in the north of India, and according to which, a lunar embolismic year of three hundred and eighty-three days, twenty-one hours, follows two common lunar years of three hundred and fifty-four days, eight hours, is that which the Athenians followed before Meton. It is the *dieteride*, in which was intercalated after the month *Posideon*, a *Ποσειδῶν δευτερος*," &c. (*Humboldt, Res. ii. 128.*)

THREE FORMS OF ZOCAMS OF THE CALENDAR OF THE MUS-
CAYS. (*Humboldt, Researches, ii. 130.*)

Rural Years of Twelve and Thirteen Sunas.		Periods of the Priests con- taining Thirty-seven Sunas.		Vulgar periods of twenty Sunas.	
I. <i>Ata</i> Common Year.	1	I. <i>Ata</i>	1	I. <i>Ata</i>	1
	2	<i>Bosa</i>	2		2
	3	<i>Mica</i>	3		3
	4	<i>Muyhica</i>	4		4
	5	<i>Hisca</i>	5		5
	6	<i>Ta</i>	6	Harvest	6
	7	<i>Cuhupqua</i>	7		7
	8	<i>Suhuza</i>	8		8
	9	<i>Aca</i>	9		9
	10	<i>Ubchihica</i>	10		10
	11	<i>Ata</i>	11		11
	12	<i>Bosa</i>	12		12
II. <i>Mica</i> Common Year.	1	<i>Mica</i>	13		13
	2	<i>Muyhica</i>	14		14
	3	<i>Hisca</i>	15		15
	4	<i>Ta</i>	16		16
	5	<i>Cuhupqua</i>	17		17
	6	<i>Suhuza</i>	18	Harvest	18
	7	<i>Aca</i>	19		19
	8	<i>Ubchihica</i>	20		20
	9	<i>Ata</i>	21	II. <i>Ata</i>	1
	10	<i>Bosa</i>	22		2
	11	<i>Mica</i>	23		3
	12	<i>Muyhica</i>	24		4
III. <i>Hisca</i> Embolismic Year. <i>Deaf suna or moon.</i>	1	<i>Hisca</i>	25		5
	2	<i>Ta</i>	26		6
	3	<i>Cuhupqua</i>	27		7
	4	<i>Suhuza</i>	28		8
	5	<i>Aca</i>	29		9
	6	<i>Ubchihica</i>	30	Harvest	10
	7	<i>Ata</i>	31		11
	8	<i>Bosa</i>	32		12
	9	<i>Mica</i>	33		13
	10	<i>Muyhica</i>	34		14
	11	<i>Hisca</i>	35		15
	12	<i>Ta</i>	36		16
	13	<i>Cuhupqua</i>	37	Embolismic suna	17
IV. <i>Suhuza</i>	1	II. <i>Suhuza</i>	1		18
	2	<i>Aca</i>	2		19
	3	<i>Ubchihica</i>	3		20
	4	<i>Ata</i>	4	III. <i>Ata</i>	1

"Among the Muyscas, it is to the singular use of numbers, the series of which has two terms less than the rural year contains moons, (*sunas*) that we must attribute the imperfection of a calendar, in which notwithstanding the intercalation of the thirty-seventh month, (*sunas*) *cuhupqua*, the harvest during six years, falls every year in a month of a different denomination. Thus the priests announced every year, by what sign the *month* (*sunas*) of the ears of maize should be presided, which corresponds to the *Abib* or *Nisan* of the calendar of the Hebrews. As the power of a class of society is often founded upon the ignorance of other classes, the priests of the Muyscas preferred an uncouth calendar, in which the eighth month (October) was sometimes called the third, sometimes the fifth, and in which the differences of season did not coincide with the *sunas* of the same name. The priests of Thibet and of Hindostan know in the same manner how to take advantage of this multiplicity of the signs that govern the years, months, lunar days, and hours; they announce them to the people in order to levy a tax upon their credulity."

"The object of the intercalation* of the Muyscas, was to bring back to the same season the commencement of the rural year, and the festivals which were celebrated in the sixth month; the name of which was consecutively *sunas ta*, *sunas suhuza*, *sunas ubchihica*. Mr. Duquesne thinks that the beginning of the *zocam*, was, as among the Peruvians, the Hindoos and the Chinese, the full moon that follows the winter solstice, but this tradition is uncertain."

"In the same manner as among the nations of Tartarian race, the cycle of sixty years was divided into five parts; the cycle of the Muyscas of twenty periods of thirty-seven *sunas*, was divided into four small cycles, each of which contained one hundred and eighty-five moons, (*sunas*) which corresponded with fifteen Chinese and Thibetan years, and consequently with the real *indictions* observed in the time of Constantine. In this division by sixty, and by fifteen, the calendar of the Muyscas approaches much nearer that of the people of eastern Asia than the calendar of the Mexicans, who had cycles of four times thirteen, or fifty-two years."

"The beginning of each *indiction* of the Muyscas, was marked by a sacrifice, the barbarous ceremonies of which,

*"The Muysca Indians engraved on stones, the signs which presided over the years, moons, and lunar days. These stones reminded the priests in what *zocam* or Muysca year, such or such a moon (*sunas*) became intercalary."

Humboldt has given the engraving of the stone procured by Mr. Duquesne among the Muyscas: and to his Researches, we must refer the reader inquisitive on this subject, as it does not fall within our province to introduce his explanations on this curious particular.

from the little we know, appear all of them to have a connexion with astrological ideas. The human victim was called *guesa*, wandering or houseless, and *quihica*, door, because his death announced as it were the opening of a new cycle of a hundred and eighty-five *sunas*. The *guesa*, was a child torn from the paternal home. He must necessarily be taken from a certain village situate in the plains, called at the present day the Llanos de San Juan, which extended from the eastern slope of the Cordilleras, to the banks of the Guaviare. It was from this same country of the east, that Bochica, the emblem of the sun, came, when he made his first appearance among the Muyscas. The *guesa* was most carefully educated in the temple of the sun at Sogamozo till the age of ten years; he was then made to go out to walk in the paths which Bochica had trodden at the period when in his instructions to the people, he had consecrated those spots by his miracles. At the age of *fifteen* years, when the victim had attained a number of *sunas* equal to that contained in the indiction of the Muysca cycle, he was sacrificed in one of those circular places in the centre of which was an elevated column.”*

“At the time of the celebration of the sacrifice, which marked the opening of a new indiction or a cycle of fifteen years, the victim *guesa* was led in procession along the *suná*, (high road) which gave its name to the lunar month, toward the column that appears to have served to measure the solstitial or equinoxial shadows, and the passages of the sun through the zenith. The priests, in masks like the Egyptian priests, followed the victim. Some represented Bochica, who is the Osiris, or the Mithras of Bogota, and to whom were attributed three heads, because like the Trimurti of the Hindoos, he contained three persons who formed only one divinity;† others bore the emblems of *Chia*, the wife of Bochica, Isis or the moon; others were covered with masks resembling frogs, in allusion to *ata*, the first sign of the year; finally, others represented the monster *Fomagata*, the symbol of evil, figured with one eye, four ears and a long tail. This *Fomagata*, whose name in the Chibcha language signifies *fire*, or *melted matter in a state of ebullition*, was considered as an evil spirit. He travelled through the air between Tunja and Sogamozo, and transformed men into serpents, lizards and tigers. According to other traditions, *Fomagata* was originally a cruel prince, whom, to secure the succession to his brother Tusatua, Bochica caused to be treated on the

* Baron Humboldt thinks it highly probable, that these columns were used by the Muyscas to mark the length of the equinoxial and solstitial shadows.

† Of this curious feature we have already taken notice in page 320.

night of his nuptials, as Uranus had been by Saturn. When the procession, which reminds us of the *astrological processions* of the Chinese, and that of the feasts of Isis, had reached the extremity of the *suna*, (road,) the victim was tied to the column we have already mentioned; a cloud of arrows covered him, and his heart was torn out to be offered to the *king sun*, Bochica. The blood of the *guesa* was received into sacred vessels. This barbarous ceremony has several striking relations with that celebrated by the Mexicans at the end of their great cycle of fifty-two years."

We must now terminate abruptly, our discourse upon the Muyscas, for want of further materials. Whatever was interesting in their history, religion, or institutions, beyond the few particulars we have already stated, has been most probably long forgotten under the fanaticism of the Spaniards. And we can hardly cherish the hope that Mr. Duquesne's memoir, should it be ever published, will after the lapse of 300 years, convey to us more than a very imperfect idea of what the Muyscá civilization was in times preceding the Spanish conquest. Yet we cannot but express some impatience to peruse a dissertation upon these subjects, which he alone, perhaps, is, or was sufficiently instructed to write.

CHAPTER VIII.

ON THE POLITY, INSTITUTIONS, &C. OF THE PERUVIAN EMPIRE.

As early as the year A. D. 1511, Balboa, famous for having first crossed the Isthmus of Darien, was informed by the Indians that to the south was a rich and powerful kingdom, whose inhabitants navigated the ocean in large vessels, (balsas,) and transported burthens on land by means of animals (lamas) trained to that service.

It was not, however, until A. D. 1530, that the Spaniards led by Francisco Pizarro, actually invaded that populous and fertile country since known to us as the kingdom of Peru,* which in a short time fell under the dominion of these bold and desperate adventurers, and became but a rich province of the Spanish monarchy.

According to Garcilazo de la Vega, who was descended from the Peruvian Incas, and who lived before the traditions of the country were altogether lost or destroyed by the Spanish conquest, the kingdom of Peru extended at the time of its discovery by the Europeans, from the river Ancarmaya, nearly on the equator, as far south as the river Mauli in Chili. On the east its boundaries were the Andes mountains; and on the west the great Pacific ocean.

We are not solicitous of accuracy concerning the boundaries of aboriginal American kingdoms, our undertaking not involving geographical limits as much as the moral and social history of their population, and we shall therefore content ourselves by saying, that the Peruvian empire proper, was circumscribed by much smaller boundaries than those given by Garcilazo, though it is also true, that the military invasions or conquests of the Incas had reached the limits already mentioned.

* I do not know whether the Peruvians distinguished their country by any general appellation, probably it was called the empire of the Incas; which included a number of different tribes and nations, each of which was known by its own peculiar name.

The name Peru, which was given it by the Spaniards, originated in the following mistake. When they first sailed along the coast, they surprised an Indian fishing in the mouth of a river and by signs and gestures inquired of him the name of the country; he misapprehending the question, answered, "I am called Beru, and this river is named Belu." Without conceiving it probable that neither understood the other, the Spaniards gave the country the name of Peru. (*Garcilazo, Royal Commentaries*, 3.)

To make this mistaken name still more ridiculous, some etymologists have considered it the Ophir visited by Solomon's ships from Eziongeber.

We may also observe, that the chief towns of ancient Peru were near the Andes, and the population more condensed in these cooler situations, than along the sea coasts. (*Herrera*, iv. 281.)

The ancient traditional history of the Peruvians according to the writings of Garcilazo, we shall introduce at once to our readers, as certain particulars are there related, essentially connected with their institutions and customs, by which we can alone impart correct views of their polity and manners. We shall do this, however, in the simplest manner possible, merely relating what they have said without present commentary, but which we shall consider at some length in a future page.

Nothing can be more rude and barbarous than the state of society, which is represented to have existed in Peru in the first ages of her history. The natives are described as living by two's and three's in holes and caves, half naked, and feeding upon whatever matters came in their way, even eating human flesh. They lived without law, government, or religion, or according to Garcilazo's words, "they were like so many brute beasts."

The sun beholding this deplorable condition of the Peruvians, felt so much compassion for them, that he sent a son and daughter of his own celestial origin down from heaven, to instruct them in religion, government, and the arts of civilized life.

These two illustrious individuals, were Manco Capac the first Inca, and his wife Coya Mama, who were placed by the sun on an island in Lake Titicaca, with permission to go wheresoever they pleased; under the sole restriction that when they should stop at any place to eat or sleep, they should there strike a little wedge of gold into the ground, and that they should at last establish themselves permanently in that place, where the wedge should sink deep into the earth.

It was not long before they reached a spot, where the wedge not only sunk into the ground but descended so deep, that they could never again recover it; and thus their future habitation was indubitably designated. At this place commenced the operations of their benevolent mission; for Manco going northwardly, and his wife southwardly, declared to all the men and women that they happened to meet, that their father the sun had sent them as their benefactors, to draw them from their rude and savage life to one more agreeable to "comfort and reason."

The savage Peruvians were struck with the appearance of

these two persons, who dressed with clothes and adorned with jewels, spoke to them with great kindness and affability. They were allured by their promises, and relating these things one to another, the fame thereof so increased and spread, that great numbers came together willing to follow Manco to whatsoever place he might be pleased to conduct them. In this manner having assembled the people of the country, they then began to erect their habitations. Thus was founded the celebrated city of Cuzco, the future metropolis of the Peruvian Incas, from which as a centre emanated those laws, institutions, and customs, that finally prevailed over the whole kingdom. Manco was constantly employed in the object of his mission; for no sooner had he built the city of Cuzco, than he began to plant colonies in various parts of the adjacent country, drawing the savage population together and teaching them all those arts and principles of government, by which Peru became afterwards so distinguished.

In process of time, Manco died a natural death, was buried by his subjects, and a regular succession of his descendants governed the Peruvian empire until the time of the Spanish conquest under Pizarro.

We shall now, under proper heads, treat of whatever seems peculiar and remarkable in the constitution of the Peruvian empire, according to the plan we have followed when discoursing on other demi-civilized nations of America.

Of the Polity of the Peruvians.

The Incas divided their empire into four parts, answering to the cardinal points of the compass; the city of Cuzco being the centre, or in the language of Peru, the *navel* of the kingdom.

The land itself was divided into three portions, one belonging to the sun, one to the Inca, and the third to the people at large.

The land allotted to the people was only for their personal use, as they could not sell or alienate their respective portions; the fee being expressly vested in the Inca.

Every year, this land was divided among the people according to the number of individuals composing their families; and at which time they received their seed corn from the Inca's granaries.

In cultivating the ground, the whole people were actuated as if belonging to one community. They first attended to the lands of the sun, and those allotted to the support of the poor, in which number were included widows, orphans, and

the families of soldiers absent in war. In the next place, every private person worked his own portion, which was about as much as required for sowing a fanega and a half of maize. The last lands they cultivated were those of the Inca, to which they applied themselves with the greatest alacrity, being dressed as if for a festival, singing songs, and making other demonstrations of joy. At this time, which was certainly a religious festival, they were continually shouting *haylli, haylli*,* which Garcilazo says, means *triumph, triumph*, as if expressing their dominion over the ground and forcing it to produce their subsistence.

The Peruvians seem to be the only American people that made use of an instrument like the plough in cultivating their fields. Garcilazo says, it was a piece of wood about four fingers broad and a yard long, flat before, round behind, and pointed at the end. At about a foot from the end, they bound two pieces of wood whereon they might put the foot and force it into the ground; it was then drawn forcibly along by six or seven persons, who appear to have been fastened by ropes to the instrument, and in this manner it is said they turned up clods of earth of large size.

They manured their grounds with the dung of animals, of which human excrement seems to have been preferred. On the sea coasts they collected the dung of sea fowls, that was deposited by these birds in large quantities on the small islands along the shores. They also used the dead fish left behind by the tides, &c.

They likewise carefully irrigated their fields with water brought in aqueducts or canals from a great distance. Of these we shall speak hereafter.

The great aridity of the soil in many parts of Peru, especially in those where it seldom or never rains, and where there was great difficulty in making a canal of irrigation, sometimes induced this agricultural people to make excavations of great extent, that the roots of their vegetables might be in as humid a situation as possible. Stevenson (*Travels South America*, i. 359,) makes a brief mention of one of these agricultural monuments at Pisco, about fifty leagues south of Lima, and which he terms "an immense labour." An intelligent commercial friend who has visited Peru, informs me, that near Truxillo is an enclosure by walls of mud or clay brick, encompassing about five acres of ground, in which is one of these sunken gardens; which he conjec-

* Does this word bear any real analogy with the *huli* of the Hindoos? a festival which is celebrated in the month of March; and the last day of which, is passed in a manner similar to that in which children and others amuse themselves among us on the first of April.

tures to have been an acre in extent, the bottom of which is about twenty feet below the natural surface of the ground.

The Spaniards call these excavations *hoyas*, and I presume they are to be met with in various parts of that kingdom.

The Peruvians cultivated maize, and quinoa, (*chenopodium*) a plant whose seed is something like rice. The potato, (*solanum*) sweet potato, (*convolvulus*) gourds or squashes, (*cucurbita*) and various other roots not known out of the country. They raised beans, (*phaseolus*) of two or three different kinds. Cayenne peppers, (*capsicum*) bananas,* (*musa*) and various other fruits. The Maguey, (*agave*) the Cuca, a plant whose leaves they constantly chewed. They raised a little tobacco; and cotton was cultivated to a considerable extent.

The revenues of the empire consisted, for the most part, in the personal labour of the people. They cultivated the fields of the Inca, and stored the produce in the royal granaries; two of which were located in every province, one expressly for the use of the natives in case of famine, the other to meet the exigencies of the Inca, the supply of the army, &c. All persons employed in the service of this prince were supplied with food from the public storehouses.

The people were also required to contribute clothing, shoes or sandals, weapons, &c. for the use of the army and for the poor and decrepid. This was accomplished by each province or district furnishing that article which was most suitable to their circumstances, and the natural productions of their respective countries. When finished they were deposited in the *tambos* or storehouses of the Inca, until they might be wanted.

The immense treasure possessed by the Inca in gold and silver, was not derived from rents or tribute, but from voluntary presentation. These metals had little value among the Peruvians except for ornamental purposes, and were chiefly applied to the decoration of the temples, palaces of the Inca, &c.

On the same principle, they presented to the Inca living animals of all kinds, who had them taken care of in proper menageries.

Women, soldiers, and all persons under twenty-five, or above fifty years of age, were exempted from taxation, as

* The banana and plantain, have been asserted by some writers to have been imported to America by Europeans or Africans. This opinion has been set aside by Humboldt and others from a knowledge of the vegetable productions of the country. But a more express proof is urged by Stevenson, (*Trav. S. Amer.* i. 332, who says, he has found beds of leaves of both plants in ancient Peruvian tombs.

were also the priests, nobles, and those of the lineage of the Inca. Newly married persons were not required to contribute any thing to the public treasury for an entire year.

From the impotent and extremely indigent, it is related, that a certain quantity of lice were exacted by the orders of the Inca. This curious tax was merely a regulation to produce personal cleanliness among such persons, and is only mentioned as a singular instance of the minutiae of their laws, and precepts of the government.*

The people were divided into tens, fifties, hundreds, and thousands, each division of which was governed or inspected by its proper officer, who managed every thing belonging to his charge and made report to the officer immediately superior to him in rank. By this means a minute account of the whole people was continually brought to the Inca, and in this manner he was enabled to issue the necessary orders for supplying local wants, and drafting of persons for public service.

These officers were required to be very vigilant in executing their duties, which, as they descended into all the minutiae of life, as exhibited in the behaviour and morals of the people, was no trifling task. Garcilazo informs us that even when children misbehaved, the officers over tens were responsible for their misconduct as well as the parents.†

No appeal was allowed from the judgment of the officers deciding on the cases belonging to their jurisdictions. But if it so happened that the officer himself was embarrassed as to the equity of the case, it was referred to the officer of greatest jurisdiction in the city or district.

In common cases, the officers or judges were obliged to decide in five days after the cause had been laid before them. All decisions were monthly reported to superior officers until they finally were brought to the Inca.

That the officers themselves performed their duty in a proper manner was attended to by the Inca, who appointed a supervisor over them called Tucuy-ricoc, who notified them of the matters belonging to their appointments, and in cases of misbehaviour reported them to the Inca for punishment; at least it does not appear that this officer had the power to do so in his own name or authority.

The punishments inflicted by the Peruvian laws were se-

* The people of Mechoacan, (Mexico) collected a similar tribute for their kings when too poor to contribute a proper revenue. (*Herrera*, ii. 300.) I believe it was not an unusual tribute exacted among the provinces of Mexico in general.

† The Japanese, (*Kæmpher*, i. 283,) have a similar police by which superiors are made responsible for the conduct of those committed to their charge.

vere, and for the most part capital.* The family of the Inca, and the nobility, were generally degraded from their rank when guilty of any transgression; but in certain cases, as for instance murder, they were put to death.

It is a very curious circumstance in the history of the semi-barbarous Peruvians, that they occasionally resorted to punishments that were simply degrading from a sense of shame. Herrera (*Hist. Amer.* iv. 337,) specifies several crimes that were punished by them when the offender was made "to carry a stone on his back, which was very disgraceful."†

From this brief exhibition, it will be perceived, that the Incas exercised a despotic sway over their subjects, governing them according to their own views and pleasure, or as the exigencies of the times may have required; hence the proceedings of the government were necessarily fluctuating, and according to the capacity and temper of the Inca were either just or unjust, capricious or benevolent.

The laws or ordinances of the Incas, were proclaimed to the people from an appointed place in Cuzco, to which they resorted when summoned for this purpose.

The Incas‡ were lineal descendants of Manco Capac and his sister wife Coya Mama, or as she is otherwise called, Mama Oello, or Mama Cora. As they were a divine race, it was a matter of consequence to keep their blood pure and unmixed, which they endeavoured to accomplish by obliging the reigning Inca to marry his eldest sister; an incest only permitted to him, it being expressly forbidden to all other persons.

Herrera says, that during the continuance of the Peruvian monarchy, the marriage of the Inca and his sister had been

* I have not been able to learn in what manner death was inflicted on criminals. Garcilazo (*Roy. Comment.* 146,) incidentally observes, that criminals were sometimes exposed to the wild beasts of the Inca's menageries; but this could be only done very partially.

† The Peruvians still shew a sensibility concerning certain punishments, which distinguishes them remarkably from other American Indians. Don Ulloa (*Voy.* i. 291,) makes the following relation. "The greatest affront possible to be offered to an Indian of either sex, is to cut off their hair; whatever corporeal punishment their masters think proper to inflict on them they bear with a dutiful tranquillity, but this is a disgrace they never forgive; and accordingly it was found necessary for the government to interpose and limit this punishment to the most enormous crimes."

‡ The word Inca, means lord or king; but more commonly it signifies any one of the royal blood: it was, however, applied only to males, the royal females being called *Pallas*.

To meet the more common sense of this word, according to European impressions, we have endeavoured to use the term *Inca*, as applicable alone to the reigning prince. Among the Peruvians, he was called *Capac Inca*, or illustrious Inca, to distinguish him from the other members of the royal family. (*Garcilazo*, 21.)

three times interrupted; twice from defect of female issue, and once from motives of policy.

The throne was inherited by the eldest male heir, and if he died without children the next eldest brother succeeded. Garcilazo 108, says, in default of male heirs, females might inherit the throne. Whether he is correct in this statement we know not, but it was never rendered necessary, there having been according to him, a perfectly regular succession of heirs from the marriages of brothers and sisters successively, from the time of Manco Capac until the subjection of the kingdom by the Spaniards. There is however, some reason to doubt this latter statement; and Herrera relates, that there had been disputes among them concerning the succession; but as these matters belong to civil history, they do not require our present investigation.

The *Llautu* or diadem of the Inca, was a fillet of woollen yarn, about as thick as the finger and dyed of various colours, which was wound four or five times round the head, and in which occasionally the feathers of a certain species of hawk were fixed perpendicularly. Their ears were also bored or cut open, and the lobe extended as wide as possible.

If their subjects chose to wear a fillet on their heads, it was required to be of a black colour, and if they dilated their ears, they were not allowed to carry it so far as to resemble the extraordinary openings in the ears of the Inca's lineage.

The standard or insignia of the empire, was a rainbow displayed on the banner of the Inca, with a snake on each side.

The Inca, besides his temporal power, was also at the head of the ecclesiastical department; and the priests were all of royal blood.

Certain officers of the Peruvian empire were called *Curacas*, lords or governors of provinces, and districts. This species of nobility was hereditary, though not always in the first born, as a certain preference was given to individuals of the family according to their capacity or talents. But as Garcilazo says the selection was made by the people themselves, the dignity became in a manner also elective.

The *Curacas* or chiefs of the foreign nations conquered by the Incas, were generally continued by him in the exercise of their original power.

The Incas lived during the latter reigns in considerable state and splendor, surrounded by every thing that their social state enabled them to deem magnificent or august.

Their palaces appear to have been a collection of separate halls or houses, arranged together with some regard to symmetry, if we may take the drawing and description of the In-

ca's palace. Cannar, as the general plan followed by them. It would be useless to attempt describing this monument without the plate, and we therefore refer our readers to Humboldt's *Researches*, ii. 194.

These palaces were sufficiently large to accommodate the retinue of the Inca, and the whole was surrounded by a wall of stone, earth, or sun-dried brick.

Gardens were attached to the palaces, in which were planted fruit trees, flowers, and odoriferous plants of all kinds.

The walls of the palace, as also the temples of the sun, were decorated with plates of gold, silver and ornaments of those metals resembling various animals and other objects, which were arranged with a view to effect.

The Inca sat upon a stool of massy gold about twenty inches high, which was also placed upon a square plate of gold. Pizarro got one of these stools in his plunder of Atabillipa, that was worth 25,000 ducats.

All the vessels used at the Inca's table and in his kitchen, were made either of gold or silver.

In many of their houses the Incas had cisterns made from the precious metals, in which they bathed themselves. The water was brought to them in pipes made of similar materials.*

When the Inca went abroad, he was carried seated in his golden stool, upon a litter borne by men on their shoulders.

We have no particular account of the furniture of the palace other than what has been stated, except that it was well provided with bedding, which chiefly consisted of a fabric like our blankets made of wool and very soft and fine.

The Inca, according to Garcilazo, wore a suit of clothing twice only, after this use he gave them to his relations or dependants.

When the Inca died, the chamber in which he usually slept was shut up with all its furniture and decorations, and no one was permitted to enter it afterwards, it being then considered a sacred place.

Garcilazo says, that every room in the palace in which he had ever slept, even if but for once, was closed in the same

* Many persons, surprised at the immense quantities of gold and silver used by the Peruvian Incas, have considered the earlier Spanish historians as guilty of gross fictions. Without attempting to convince this unreasonable scepticism upon matters notorious to numerous Spanish writers on Peru, we will only adduce a single fact. In a tomb of a Peruvian prince, opened by a Spaniard A. D. 1576, massive gold to the amount of one million of dollars was there found, as is proved by the book of accounts preserved in the Mayor's office at Truxillo, where the receipt of one fifth of that amount is acknowledged by the Spanish officer, as the king's proportion. (*Humboldt, Res. i. 92.*)

manner. But for every apartment thus shut up new ones were built for the use of the succeeding prince.

A numerous body of servants and domestics were always in attendance on the Inca, such as sedan carriers, keepers of the wardrobe, butlers, cooks, porters, gardeners, sweepers, carriers of wood, water, &c. These servants, however, were not permanently established about the person of the Inca, for the provinces in rotation furnished them, and superseded them when they pleased, after a service of a few weeks or months.

The consumption of provision about the court, was of course, from the number of persons there employed, very great; but more especially, because all the branches of the Inca's kindred were allowed to draw their living from his kitchen. Hence the great allowance of food, clothing, &c. which was given from the lands cultivated by the people; a circumstance we have mentioned in a preceding page.

The Inca's queen was his own sister, as we have already stated, and her children alone could succeed to the throne. But the Incas also had large harems; Huayna Capac is reported to have left at his decease above two hundred children.

Polygamy was forbidden to the people at large according to Garcilazo; but the contrary statement is so expressly made by Herrera, that we shall adopt his account and the impression that they might have as many wives as they could procure and maintain.

Of the Manufactures of the Peruvians.

From the wool of the lama, vicunia, &c. the Peruvians spun and wove garments suited to their necessities or local exposure.

The wool required by the people, was partly derived from the domesticated flocks of lamas belonging to the Inca, and partly from the wild animals they surrounded in those great hunting expeditions which annually took place in one of the four quarters or divisions of the empire, and by which means the whole kingdom was examined in the course of four years. At these hunting matches, all animals furnishing wool were shorn, and then permitted to escape. The coarser kind of wool was distributed among the people, and the finer qualities reserved for the use of the Inca and his family.

In the hotter parts of the country, cotton was supplied by the Inca for the clothing of his subjects.

The materials for making other fabrics and clothes they

procured by their individual exertions: we have little account of them, except, that they made a kind of coarse linen from the maguey plant, and from the skins of animals, they prepared a leather like that of the chamois.

The fashion of their clothes was prescribed by law, and distinctions were established for the different provinces. Any departure from the regulations was severely punished by the Inca.

According to Herrera, the habit of the Peruvians was a short tunick or chemise, without sleeves or collar, and loosely adjusted on the person. Their arms and legs were exposed and bare. Over the whole body, when necessary, they wore a cloak or mantle a yard and three quarters square. This cloak is the *poncho* of the Spaniards. It has a slit made in the middle through which the head is passed, and the ends hang down all round the body.*

On the feet they wore a sole made of flags, rushes, &c. tied on like the ancient sandal.

Besides the *Llautos* or fillets, which they bound round their temples to distinguish their province and country, Acosta, page 467, says, "In some places they wore a long piece of cloth, which was wrapped several times round the head; in other places, it was wrapped once round. In other parts they wore little mortars or caps; in others, high and round bonnets, &c. with a thousand other differences."†

We have been particular in remarking this circumstance of the Peruvians using a cover for the head, as it distinguishes them in a remarkable manner from other demi-civilized people of America.

The dress of the women, seems to have differed chiefly from that of the men, in the chemise being made longer, and the mantle of smaller size, which they wore as a shawl tied over the shoulders.

They wore necklaces of gold or silver, beads of various substances, and of different colours.

The Peruvians used tools of copper hardened by an alloy of tin. One of their chisels on being carried to France, was analysed and found to be composed of 0.94 copper, .06 of tin; a composition which is said (*Humboldt, Researches*, i. 260,) to cut wood like steel.

* The *Trabæa* of the Romans was of a similar fashion, and is yet, with some little alteration, worn by the Roman Catholic priests under the appellation of Chasuble. The *Habba* of the Arabs, (*Malte-Brun, Geog. book 30*), is also a similar garment, as well as the *Tebuta* of the Otaheitans.

† Garcilazo says, "the common people of Canaris sometimes used the shell of a gourd or pumpkin to cover their heads, and that "the nobility wore a cap of thin woven thread, like a sieve, scarce above three fingers high." (*Roy. Comment. 308.*)

Their chief tool, however, was a copper hatchet, the handles of which were made of the same metal, and projected a short distance on either side of the instrument.

They cast gold, silver, and other metals, into various figures of men, animals, trees, plants, &c. They also manufactured them into dishes, cups, jars, and other household utensils.

Ulloa (*Voyages*, i. 496,) mentions the delicacy of their gold castings with some wonder as to the manner they were enabled to fabricate them.

The same author (*Mem. Philos.* ii. 101,) says, that balances made of silver, have been found among Peruvian monuments, the dishes of which were in the shape of cones reversed.

In melting the metals, they used blow-pipes made of copper about a yard long, and when necessary they combined five, six, or more of them, as the work required.

They manufactured from clay various kinds of earthen ware into convenient shapes, sometimes ornamented with whimsical devices. I have two double cups taken from a Peruvian tomb, which when half filled with water and gently agitated, produce a whistling noise through the bills of the birds' heads that surmount the vessels.

They made large bricks from clay and stubble, which were dried in the sun and then united together with a cement of tempered clay. They also used on some occasions, a mortar containing lime; and another kind made of asphaltum. (*Humboldt, Res.* i. 257.)

In the ancient Peruvian tombs, (*guacas*) are still found when opened, various articles of their manufacture that had been interred with the dead. Ulloa (*Voy.* i. 494,) describes such things with some detail. They are mirrors made of the Inca stone, and the Gallinazo stone:* those made from the first named material are as highly polished as could be done by the best European workmen.

Idols and ornaments of gold are also found, exceedingly well cast, being made hollow and as thin as writing paper, without any marks of having been soldered.

"Yet all we have said," (Ulloa) "is surpassed by the ingenuity with which they had wrought emeralds, these gems being found cut into various shapes, some spherical, others cylindrical, conical, and various other shapes, made with perfect accuracy and drilled through with all the delicacy of

* The substance shewn to me as the Inca stone, is a *marcasite*. I have never seen the Gallinazo stone, but believe it to have been obsidian, from the various incidental observations made upon it by the Spanish writers.

our European artists. It is an almost unsurmountable difficulty to explain how they could work a stone of such hardness."

I presume they also worked crystallized quartz into various ornamental figures, and that the bracelet of the high priest, which was used to kindle their consecrated fires, was of this substance, cut into the shape of a convex lens.

In some few instances at least, they made stone statues of their gods and Incas. (*Herrera*, iv. 298, 314.)

They squared the stone used in their buildings with the greatest care and accuracy. It is doubtful whether they attained this end by simply rubbing them down to the desired shape, or whether they cut them with their copper chisels. Condamine (*Humboldt*, *Res.* i. 258,) says, "the stones used in the construction of the palace of Cannar, are of porphyry and so exquisitely cut, that the joints would be imperceptible but for a slight convexity of the exterior face, which no doubt was intended to be ornamental."

We shall conclude this brief notice of their manufactures, with the single additional fact, that they also made salt from saline springs near Cuzco. (*Garcilazo*, 262.)

The Peruvians, far exceeded any other demi-civilized people of America in their contrivances to save human labour. They had two species of animals trained to carry burthens; these were the Llama, Guanaco, or Huanacos, and the Paco, or Alpaco: according to our present nomenclature, *Camelus Glama*, and *Paco*. The common name *Llama*, is a generic one among the Peruvians for several similar species of animals. (*Garcilazo*, 329, 331.)

Of the two, the Paco was much smaller and comparatively little used for the purpose of carriage.

Along the sea coasts, the Peruvians made use of *balsas* or sailing rafts, for transporting commodities of various kinds. These were literally simple rafts made of logs of light wood, on which a large mat sail was hoisted. But by the ingenious device of lowering flat pieces of timber down into the water between the logs composing the raft, they were enabled, from the resistance thus made to sail close hauled on a wind. The principle is the same with that which has fitted "lee boards" to vessels of shallow drafts.

But notwithstanding these improvements, and the magnificent roads that passed through the dominions of the Inca, the Peruvians were not a commercial people. They were restricted by law to particular labours for the common good, and therefore individual industry and activity being restrained, the prosperity and happiness of the people was injured

to a great degree. It may perhaps be an ill-placed observation, but I cannot forbear remarking, that the general happiness of every people seems to be diminished just in proportion to the interference of government, in undertaking to regulate the industry of their people; which invariably forces it into directions contrary to what the state of society requires, and evidently would take, if left to individual interest and sagacity.

Of the Architectural and Public Works of the Peruvians.

The palaces of the Incas, and the temples, were chiefly built of stones well polished, and joined together, sometimes without cement, in other instances with a real mortar of lime, sometimes with asphaltum, and not unfrequently they were bound together by melted lead, silver, or gold.

In general, they did not make their buildings of more than one story, nor did they join room to room. Each house, therefore, consisted of one apartment only; but they were assembled so closely together, as to answer all the purposes of a suite of rooms.

Most probably, this style of building continued unimproved, from the circumstance of the country being often visited by dangerous earthquakes, which render loftier habitations more dangerous to the in-dwellers. That they knew how to construct buildings with several stories, is evident from the relation of Garcilazo, who says (*Royal Commentaries*, 467) that at the entrance of the royal palace at Cuzco, was a tower four stories in height, and so lofty, that it exceeded any spire in Spain, but that of Seville.

It is also observable, that after the walls were raised to the desired height, they erected pillars in the middle of the apartment when of large dimensions, to support the roofs; for they were ignorant of the art by which an inclined roof is constructed according to European carpentry. Neither did they use pins or nails to fasten down the beams and rafters, contenting themselves with tying them fast together with ropes of rushes. Over the rafters they laid a covering of straw thatch, which extended a yard or more beyond the walls.

Some of their houses were very spacious, if Garcilazo be correct, when he says, that some measured about two hundred paces in length, and fifty or sixty in breadth. As several such mentioned by him were roofed, he expresses much surprize how they found timber sufficiently long for that purpose.

Besides stone walls, they also built them with brick dried in the sun. These bricks were made by ramming clay mixed with straw into large cases or moulds. They were of very large size in comparison with those used by ourselves; for Garcilazo says, the smallest were about a yard long, one sixth of a yard in breadth and thickness. After they were made, they were dried in the sun, and kept from the weather for two or three years; when they used them, they were cemented together with well tempered clay.

Notwithstanding the assertions of Acosta and Garcilazo, the Peruvians certainly did know how to construct arches and vaults; for many of their ancient tombs are vaulted, (ceintrées) as also the subterranean passages of the fortress of Cuzco. (*Mem. Philos. Don Ulloa*, ii. 457, *Notes*, &c.)

The temples were built of stone, in a similar manner with the palaces of the Incas; but it is impossible to describe them from the vague account given by Garcilazo, who indeed declares, he was ignorant of the dimensions of the one at Cuzco, and therefore makes no estimate. What little we are able to say on this subject, will be introduced in our observations on the religious system of this people.

The Inca Huayna Capac, the father of Atahualpa, more commonly called Atabilpa, has the reputation of having constructed, or perhaps rather of having completed, two immense roads which extended from Cuzco to Quito, a distance of about 1500 miles. One of these roads lay along the plains, while the other passed over the mountains. Though Europeans have persuaded themselves that these roads were merely "staked paths," Baron Humboldt (*Res.* i. 241) describes the mountain road in the following language. "We were surprised to find at this place, (Paramo del Assuay) and at heights which greatly surpass the top of the Peak of Teneriffe, the magnificent remains of a road constructed by the Incas of Peru. This causeway, lined with free stone, may be compared to the finest Roman roads I have seen in Italy, France or Spain; it is perfectly straight, and keeps the same direction for 6 or 8,000 metres, (four or five miles.) We observed the continuation of this road near Caxamarca, 120 leagues to the south of Assuay, and it is believed in the country that it led as far as the city of Cuzco."

The road along the plains, appears to have been an earthen road, much inferior in point of execution, to the one we have described.

These roads were emphatically royal roads, for none travelled them except upon the Inca's business. Other per-

sons that ventured to use them, unless for very short distances, were taken up as vagabonds and punished. (*Garcilazo*, 145.)

On various parts of these roads, as well as on other highways, the Peruvians made bridges for passing rivers and chasms. Most commonly they were of the kind called hanging bridges, in which a number of strong ropes of vines, rushes, &c. were stretched over the place to be crossed, and being tied together, enabled persons to walk over in safety.

At other times, a single stout rope was stretched across, to which a hammock was slung on loose rings: the passenger being placed in it, was drawn over by lines affixed to its ends.

It appears from Gomara, quoted by Garcilazo, page 570, that the Peruvians had also erected a few stone bridges.

Humboldt (*Researches*, ii. 75,) says, the ancient Peruvians also constructed bridges of wood, supported by piers of stone; though they commonly satisfied themselves with those made of ropes.

At convenient distances along these roads, *tambos*, or houses for the accommodation of the Inca and his suite, were erected, at which he sojourned when travelling through the various provinces of his empire. For a description of one of these monuments, see Humboldt's *Researches*, i. 240, &c.

These *tambos* were also, according to Garcilazo, magazines or storehouses, in which a part of the agricultural produce of the country was annually laid up for public uses.

The Incas had swift runners stationed along the roads, at about a quarter of a league distance apart, who carried orders or intelligence to or from the capital. Each messenger, after running his appointed distance, communicated either verbally, or by means of the *quippos*, whatever they were required to despatch.

These couriers ran so quick, that the Inca at Cuzco, was accustomed to receive fresh fish from the sea for the use of his table, in about two days, though the distance exceeds three hundred miles. (*Acosta*, *Nat. and Mor. Hist.* 468. *Herrera*, iv. 333.)

The more arid parts of the Peruvian empire, were supplied with water for agricultural purposes by means of long aqueducts or canals, which Garcilazo, (*Royal Comment.* 173,) describes to have been constructed in the following manner: Cisterns were built in the mountains to collect the water, which was then conducted through channels made of hewn stones, about two yards long, and one in height, which

were cemented together and rammed down with clay so hard and tight, that the water could not pass through the interstices. These canals wound round the mountains, and extended into the plains, and at suitable points, the water could be drawn off to irrigate the cultivated lands.

One of these canals, according to the above writer, was 120, and another 150 leagues in length. The Spaniards have permitted them to fall into ruins, yet traces of them are still to be seen.

Stevenson (*Trav. S. Amer.* i. 412,) says, that at Huaura, (about eighty miles north of Lima) vestiges of the old Peruvian canals are still visible, in which the waters of the Huaura river were brought the distance of ten leagues.

Of the Wars of the Peruvians.

Garcilazo represents the offensive wars of the Incas with adjoining nations, to have had no other end than that they might be civilized. He says, they first endeavoured to persuade such nations to receive their religion and social system, which if rejected, they then attempted to starve them into compliance, and as a dernier resort only, gave battle when the preceding means did not produce the desired change.

Though we give no credence to such disinterested motives as are here claimed for the military operations of the Incas, we must do them the justice to state, that their wars appear to have been less ferocious and sanguinary, than those of any other half civilized people belonging to either the eastern or western continent; which is perhaps the highest praise we can give to their social institutions.

When a nation became subjected to the Inca, they were put under the common law of the land, and carefully instructed in their religious faith,* in agriculture, and other arts possessed by the Peruvians. They were also required to learn the language of the Incas, (Qquichua,) and for these purposes persons were sent from Cuzco to teach them.

The armies of the Peruvians appear to have been made by drafting levies *en masse*, though on this point I have not been able to get any exact information.

The officers were of various ranks; some commanding ten, others fifty, five hundred, or a thousand men. The generals or chief officers were appointed by the Inca.

Their weapons were slings, which they used with great effect, (*Herrera*, v. 25,) bows and arrows, lances, darts, pole-

* Garcilazo 149, says, the principal idol of every subdued people was carried as if a captive to Cuzco, to shew its inferiority to the power of the sun and the Inca.

axes, clubs, macanas, &c. They also used the *lazo* or noose, the *bolás*, and instruments like the *pogamoggon*, all of which we have described at page 134.

I have met with no account of their having used shields or any other defensive armour; though Garcilazo says they manufactured helmets and targets.

The Peruvians do not appear to have taken any trophy from the vanquished. But some of the adjacent nations flayed the dead and stuffed their skins with ashes. This was done once by an Inca, (*Herrera*, iv. 307,) but it is a rare instance.

The young men of the Inca's lineage, underwent a certain initiation before they were admitted to the privileges of manhood. The ceremony chiefly consisted in their fasting for several days on the smallest quantity of food necessary to support life, in running up steep ascents, combatting with each other with blunted weapons, in privation from sleep, and in the infliction of voluntary wounds, &c. until the time appointed for their probation was fulfilled. If any one was unable to bear the rigor of these exercises he was considered disgraced. Garcilazo says, that none but the Inca's sons were admitted to these trials.

Those who distinguished themselves during their probation, had their ears bored and distended to a large size, and various ornaments and insignia were given them.

It was the persons thus distinguished, whom the Spaniards called knights of an order of chivalry.

The military works of the Peruvians, were chiefly walls of rough stone laid together without cement. The fortress of Cuzco, which seems to have been the greatest work of this kind, is described by Garcilazo, as being constructed of three immense walls or ramparts surrounding a hill.* He says, it was built rather of rocks than stones; to which fact Acosta (*Nat. and Mor. Hist.* 460,) bears witness; for he measured some stones in the wall, that were thirty feet in length, eighteen in breadth, and six in thickness. In the intervening spaces between these stones, others of smaller sizes were fitted, so that the walls were in a manner smooth and perpendicular.

The outer wall, is stated to have been about twelve hundred feet in compass. Through the walls were gates which communicated with the innermost part of the fortress, where, according to Garcilazo, were three strong towers, two of which were square, and one round. The latter was appro-

* Hills or mountains fortified by walls of earth or stone, were called *Pucuras*, and are so common in Quito, according to Ulloa, (*Voy.* i. 504,) that one scarcely meets a hill without them.

priated to the use of the Inca, the two former were for the lodging of the garrison. Under the towers were subterraneous passages of great extent communicating with each other. Schneider (*Ulloa, Mem. Philos.* ii. 457,) says, they were vaulted. (*ceintrées.*)

In the midst of this fortification, was a fountain affording a plentiful supply of water, which had been providently brought by the Inca in pipes under the ground, from some source in the neighbourhood, which these sagacious princes kept secret from the people.

Of the Astronomy and Learning of the Peruvians.

The Peruvians, according to all the accounts that have reached our times, seem to have been very much inferior to the Mexicans in the correctness of their astronomical system. I have some doubt, however, whether their calendar arrangement has been correctly described by the early Spanish writers. Even the little they have been pleased to communicate, has been done in so vague and unsatisfactory a manner, that I have not been able to ascertain the names of their months, nor their precise number of days.

Now, as the Peruvians made by means of towers constant azimuth observations on the sun's rising and setting, and also upon the shadows cast by pillars at the times of the equinoxes and solstices, I cannot easily perceive a reason for the great inaccuracy of their year as it has been represented to us; and I am therefore inclined to think, that only some grosser part of their calendar has been preserved. In this opinion I am further seemingly strengthened, by not finding the Spanish writers to describe any cycle of years to have been used by them, which the nature of their observations would hardly have permitted them to dispense with.

We are unable, however, to furnish any evidence to support this opinion, and shall therefore with the preceding expression of doubtfulness, proceed to describe the Peruvian calendar from the best authorities attainable to our means.

Herrera, (*Hist. Amer.* iv. 348,) says, "their year was divided into twelve months, distinguished by their several names; and particular festivals appointed in each of them. The year began in January, till one of the Incas ordered it should commence in December, at which time they celebrated their greatest festival."

"Their year, as has been said, consisted of twelve months or moons, and they threw in the twelve days over and above the moons among the said months; and to keep their reckon-

ing orderly, they had twelve little pillars or columns placed on the hills about Cuzco at such distances, that each of them every month shewed where the sun did rise, and where he did set, and by them they gave out their festivals, and the seasons for sowing, reaping," &c.

Garcilazo (*Royal Comment.* 44,) says, that they also erected pillars of marble in the area before the temple of the sun, and by measuring the shadows that fell on the smooth ground, they ascertained the times of the equinoxes and solstices, when festivals were held in honor of the sun.

The same writer further remarks, that as their month and a lunation were synonymous, the "weeks they called quarters of the moon." I rather consider Garcilazo erroneous in this subdivision of the month into fourths; for in another page he relates, that the Inca Pachacutec ordered the markets to be held every nine days, which seemingly implies a division of the month into thirds. These market days, like the *nundinæ* of the ancient Romans, were also in a manner their court days for public business.

The Peruvians, unlike the Mexicans, were ignorant of the causes of eclipses, for they supposed the planets at such times to be sick.

They particularly distinguished the planet Venus, some of the brighter fixed stars, the pleiades, the milky way, &c. to all of which they gave certain names, and imagined them for the most part to be, or to represent, various animals which they were accustomed to meet with in Peru.

With this meagre account of Peruvian astronomy, we have been obliged to content ourselves. It involves no matters of curious investigation, being analogous in its features to the years of all other nations using the moon as their measure of time. But as the Peruvians measured the equinoxial and solstitial shadows thrown by the sun, they were enabled to correct their time, which it would seem was done by the intercalation of eleven or twelve days in every year. I cannot therefore but infer, that either their solar observations had been practised but a short time before the Spanish conquest, and that they had not multiplied them sufficiently to have made a more correct system, or that their more scientific calendar has perished under their European oppressors.

The Peruvians were also far behind the Mexicans in their system of recording historic events; for they not only were ignorant of alphabetical writing, but they made no use of hieroglyphics or paintings.

The *quippos* by which they attempted to supply these deficiencies, were cords of various colours, upon which they

tied different kinds of knots, which but simply reminded them of some event, fact, or circumstance, important or interesting to them, when such and such a knot was tied. The system, however far it may have been carried, was nothing more than the plan I have seen adopted by some of my acquaintances, who tie a knot in their handkerchiefs, when they propose doing something they are fearful of forgetting.*

In like manner they used small stones of various kinds and colours, as may be seen in Acosta, (*Nat. and Mor. Hist.* 450,) who, however, seems to have considered the device much more perfect than it is possible to have been.

The wampum belts of the North American Indians are of the same nature, and it is probable, similar devices have prevailed very generally among other nations. Gili (*Humboldt, Pers. Nar.* vi. 29,) is said to have observed the quippos in use among the Indians on the banks of the river Oronoco.

The Ardrasians, a nation on the slave coast of Africa, (*Mod. Univ. Hist.* xiii. 363,) "use a small cord tied in knots, to each of which they affix certain ideas, and by this means convey their sentiments to a distance."

The islanders of the Indian ocean, (*Crawford, Ind. Archip.* i. 253,) "keep a certain remembrance of things by tying knots on a cord, or by cutting notches on slips of wood."

Knotted cords like the quippos, were anciently used in China for similar purposes. It is stated in the Yih-king (*Morrison, Chin. Dict.* i. 592,) that "in high antiquity knotted cords were employed by government, but in subsequent ages the sages exchanged them for written documents or books."

There was a certain class of men among the Peruvians called *Amautas*, translated "philosophers" by Garcilazo, "who taught something of poetry, music, philosophy and astrology, as far as they were able," to the children of the Incas and the nobility. Commoners, were excluded from these schools, where it is said the Inca himself sometimes delivered an address or lecture.

I suppose it was this class of men to whom Herrera (*Hist. Amer.* iv. 331,) alludes, when he says, that when the Incas died, there were "discreet men of note whose business it was to relate their actions if they deserved it, and they composed of them very regular songs and ballads to be learnt of all persons," &c.

* Skinner (*Present State of Peru*, 17,) says, the Peruvian shepherds still make use of the quippos to reckon the number, increase, or diminution of their flocks. For this purpose it will answer very well.

Garcilazo (*Royal Comment.* 49,) also says, the *Amautas* "invented comedies and tragedies, which on their solemn festivals they represented before the Inca and the lords of his court. The actors were not men of the common sort, but *Curacas*, or some of the young nobility and officers of the army, who each acted his own part. The plot or argument of their tragedies, was to represent their military exploits and the triumphs, victories, and heroic actions of their renowned men. The subject or design of their comedies, was to demonstrate the manner of good husbandry in cultivating and manuring their fields, to shew the management of domestic affairs, with other familiar matters."

If Garcilazo has not exaggerated the bragadocio declarations of the nobility on public occasions, concerning their ability and success in war, as was practised among the Florida nations, (page 165) his relation is very curious, and is the only instance I have yet met with, in which theatrical exhibitions might appear to arise from incidents of civil life. Among all other nations, as far as we are informed, such things proceeded from religious scenical representations and processions.

Neither Garcilazo nor Herrera state whether the *Amautas* were priests, or of the priestly order; but according to the analogies afforded by other nations we may presume this was the case.

Of the Social Habits of the Peruvians.

The Peruvians, seem to have enjoyed little of that pleasant intercourse with each other, which in civilized countries is considered the chief gratification of the social compact. In truth, their society resembled that of monastic institutions, in which every particular of life is regulated, and punishments inflicted when certain bounds are transgressed. Hence their general character was melancholy and timorous, awaiting orders to do any thing that might be necessary; and in great submission to their rulers, whom they considered a race superior to themselves.

The great body of the people were indigent, living chiefly upon grain and pulse raised by their own labour, and in times of scarcity being furnished with food from the public granaries. They eat very little meat, and that chiefly at the great annual hunting matches, of which we have already made brief mention, page 364. At these times, when the animals producing wool were shorn and suffered to escape, others such as deer, &c. were killed, and their flesh was distributed among the people.

They cut this meat into thongs and slices, which were dried in the sun, and thus preserved for a long time.*

They appear to have domesticated in their houses, to a small extent, some of the rabbits of the country, which they occasionally used for food, as also a species of duck or goose. (*Garcilazo*, 334.)

I believe they did not domesticate any other animals for mere purposes of food.

In general, they simply boiled their maize, or parched it over the fire to prepare it for food; but at other times, they made bread from meal, which was procured by crushing the grains between two stones,† rudely fashioned, so as to facilitate the manipulation.

They carefully dried the potato, in which state it kept a long time, and was considered good food.

They used salt with their food, made from salt springs near the city of Cuzco.

They made sweet syrups from the stalks of maize, and from the maguey plant.

They prepared an intoxicating drink, according to *Garcilazo*, by steeping maize in water until it sprouted. It was then mashed and boiled in the same water. After a time, they drew the liquid off, and set it by for a few days, when it acquired from fermentation, intoxicating qualities. The manufacture of this drink called *Vinnapu*, was forbidden by the Inca.

A more common and intoxicating drink, in taste resembling cider, was used by them under the name of *Acua* or *Chicha*, the filthy preparation of which, we have remarked to have been widely extended among the South American nations, and the islanders of the Pacific ocean.

The chicha, was prepared by a number of persons chewing the dried grains of maize, quinoa, &c, and then spitting the champed grain into a vessel prepared for the purpose: water was then poured on, and the whole left to ferment. *Acosta* says, that "the chicha made from grain, which had been chewed by old withered women, which makes a man sick to hear, was reputed the best."

Concerning the analogous practices of the South sea islanders, the reader will please refer to page 96.

Don Ulloa remarks, (*Voy. i.* 422) that though drunken-

*The Peruvians called this dried meat *Charqui*, from which I presume, we have made our term, "Jerked," as applied to the dried beef we receive from South America.

†*Garcilazo* describes the Peruvians to be acquainted with the pestle and mortar for bruising their corn, but that it was considered more laborious than to use stones for crushing the grain.

ness was a notorious vice among the Indians of Peru; yet, it was worthy of notice, that the women, whether married or not, and young men not of sufficient age to contract matrimony, entirely abstained from this vice; it being a maxim among them, that drunkenness was only the privilege of masters of families, as being persons, who, when unable to take care of themselves, have those about them to render them that service.

Among other Peruvian gratifications, we must take notice of the use they made of the leaves of a plant called by them coca or cocu. They wrapped up in these leaves the ashes of burnt bones, lime, or marly earth, and chewed this mixture constantly, under the idea that it supported their strength and rendered them capable of greater exertions. (*Acosta Nat. and Mor. Hist.* 273. *Ulloa Voy.* i. 360.) The latter says, "the coca is exactly the same with the betel of the East Indians; the plant, the leaf, the manner of using it are the same." Stevenson (*Trav. South Amer.* ii. 63,) says, the coca leaves are those of a small tree resembling the orange tree in appearance.

Tobacco, though known to the Peruvians, was but little used, and that as far as I have been able to learn, only medicinally as snuff. It is most probable, that the use of the cocu prevailed to its exclusion.

Their musical instruments appear to have been very few and simple. Garcilazo only mentions the Syrinx, and flutes with four or five stops; and on one occasion, the beating a drum during a festival, is mentioned by him and Herrera.

At their festivals, they sung odes and songs, and danced. I presume these dances were pantomimic, exhibiting the employments of life, the stratagems of war and hunting, (*Gar. Roy. Com.* 110, 224.)

Their sedentary games appear to have been few, a circumstance remarked by Ulloa. He describes one which we shall notice from its resemblance to our dice. It is played with a bone cut with seven faces, one of which counts *ten*, another is blank, and the other five are marked from one to five with as many points or dots. The manner of playing, is to toss up this bone and count the mark on the upper face. Whoever first counts a hundred, wins the game. (*Ulloa Voy.* i. 424.)

Of the Marriages of the Peruvians.

It is presumable, that female chastity was not held in greater honour among the Peruvians than among other

American nations, a trait which is common enough among all rude nations, wherever they may be found.

The laws of the Incas permitted public prostitutes; though according to Garcilazo, (*Roy. Comment.* 114,) they were accounted infamous. Don Ulloa (*Voy*, i. 429,) describes the men to manifest a perfect indifference upon the subject of virginity, in the persons of their brides, which, perhaps, did not belong to them in an equal degree, when under the dominion of their Incas. But even in those more ancient times, incontinence prevailed to such an extent, that to prevent the commission of infanticide, the Incas (*Herrera*, iv. 341,) established foundling hospitals, in which infants were received without inquiry, and were brought up at the Inca's expense, until of sufficient age to be employed in his service.

Every two years, the Inca commanded an account to be taken of all the young men belonging to his lineage, between twenty and twenty-four years of age, and of all the girls between eighteen and twenty. He then taking the hands of each couple, whom we presume, had previously selected each other, joined their hands together, which constituted the nuptial ceremony.*

Houses were furnished the new married persons by the provinces, and their own parents and relations supplied them with the various articles of housewifery.

The common people were married in a similar manner, by the Curaca or Lord of the district, who joined their hands as was done by the Inca as above stated. Their houses were built by the community to which they belonged, and were furnished by their kindred and friends.

It was not lawful to marry out of their own province or tribe, though they might choose any one among these excepting their sisters.

Matrimony was prohibited in the first degree of consanguinity to all persons but the reigning Incas, who were required to marry their eldest sisters. The Inca Huyana Capac, by special law, allowed the curacas or nobility to marry their half sisters, as a great privilege. (*Herrera*, iv. 330.)

Notwithstanding Garcilazo's express declaration that the Peruvians were permitted but one wife, Herrera (*Hist. Amer.* iv. 330, 342,) says, it was no offence to have several wives, and that the nobility indulged themselves with large harems.

*Acosta and Herrera describe the nuptial ceremony, to consist in the bridegroom putting a shoe on the bride; but Garcilazo, with seeming probability, says this was a custom in some of the provinces only, and not the proper Peruvian formula.

Adultery of the wife was punished with death, but not so in the case of the concubine.

From Ulloa (*Voy.* i. 430,) we learn, that married persons very easily divorced themselves from one another, which though an observation of but a few years back, we are inclined to think from the permanency of all Indian customs, was equally the fact during the reigns of the Incas.

Of the Funeral Ceremonies of the Peruvians.

Like all other nations that we have heard of, the Peruvians believed in the immortality of the soul, and though no relations have descended to our times, describing their peculiar ideas concerning the nature of the future state, yet from ceremonies used at their funerals we may safely infer, that they considered it nearly analogous to our present state of existence, but in which the good alone should enjoy happiness and abundance, and the bad be forced to endure a state of being, much inferior even to the diversified conditions of the present life.

When the Inca or any person of consequence died, their bodies were embowelled and then gradually dried.* The bowels of the Inca were interred at a temple about five leagues distant from Cuzco, and with them were buried his arms, garments, and such other things as had been useful to him whilst alive. Many of his domestics were also put to death and buried in the same grave, that they might render their wonted services to him in the invisible world.

The bodies of the Incas when perfectly desicated, were placed in a sitting position before the image of the sun at the temple of Cuzco, where sacrifices were offered to them.

They not only made great lamentations over their dead, but it would seem they also used mourning clothes, which, according to Garcilazo (*Roy. Comment.* 357,) were of a grey colour.†

From the multitude of tumuli still existing in Peru, and

* Acosta says, the Peruvians embalmed their dead Incas "with a certain rosin:" but Garcilazo, who had seen such bodies, declares he perceived no such substance, and expressly states, that he considers the manner to preserve dead bodies, is to dry them gradually on cold mountains. In such situations he says, the flesh of animals is preserved from putrefaction as long as we please.

In another place he remarks, that at Cuzco, flesh if hung up in an airy situation, will, if kept long enough, be dried like mummy, an experiment he had himself made.

† Though Garcilazo says, "mourning weeds," I am not certain but this grey dress was rather worn as a mark of humiliation by the Inca, on the occurrence of general misfortune, than as indicative of the loss of friends by death.

which are from time to time laid open, we may learn that the general practice among this people was to bury, not burn their dead. The corpses are found sitting on a low seat, or in a squatting posture, (*accroupis*) with food, utensils, &c. placed before them. (*Ulloa, Mem. Philos.* ii. 447.)

These tombs are mounds of very different degrees of magnitude, according to the rank of the individual interred beneath. They are found all over the kingdom, but are remarkably numerous within the jurisdiction of the town of Cayambe, (*Ulloa, Voy.* i. 492,) its plains being as it were nearly covered with them. This frequency of *tumuli*, arises from the fact that a principal temple of these people was anciently erected there, whose proximity was supposed to sanctify the adjacent country.

As we have already alluded to those customs among other nations that seem analogous to the Peruvian funeral ceremonies, we forbear to again enumerate them at this time.

Boguer (*Mem. Philos. Ulloa*, ii. 434,) describes sepulchral mounds in Peru, that are forty feet high by seventy fathoms (*brases*) in length, and forty in breadth. They are traversed by long passages, by which we arrive at the bodies.

Bayer describes some tombs made of hewn stone, three or four ells square and from three to six in height, covered with flat stones.

But, perhaps, the most curious of these tombs, are those made of sun-dried brick, which are said to be *vaulted* (*voutés*) like the tops of bread ovens; (*la forme étoit en cul-de-four*) and which proves that the architectural knowledge of this people, was much superior to what has been allowed them by Garcilazo, Acosta, and others. (*Mem. Philos. Ulloa*, ii. 458, notes.)

Of the Religion of the Peruvians.

We have already observed, that the Peruvians believed in the immortality of the soul, and its reward or punishment according to virtuous or evil actions performed during life. But of what nature the rewards or punishments were, has not been related by any of the writers on this subject accessible to me. Acosta (*Nat. and Mor. Hist.* 345,) contents himself with saying, that they believed "the good were in glory, and the bad in pain;" but he adds nothing more to this, than that there is no difficulty in teaching them this doctrine of the christian faith.

Herrera (*Hist. Amer.* iv. 348,) informs us, that the Peruvians at certain times made confessions of their sins; whereby we learn the nature of those offences that they considered

obnoxious to divine displeasure. These were "killing, when it was not in war, stealing, taking another man's wife, poisoning or bewitching, neglect of the service of the gods, breaking their festivals, and speaking ill of the Inca, or not being obedient to him; but they did not confess any inward sins."

As we have already discoursed upon the phrase "confession of sins," we beg leave to refer the reader to page 309, for some observations on that subject.

The Peruvians, according to Acosta, (*Nat. and Mor. Hist.* 333,) worshipped a supreme God, whom they called Viracocha, the etymology of which we are unable to detect.* He was also known by the appellations of Pachacamac, *soul of the world*, Usapu, *admirable*, and other names.

Garcilazo (*Roy. Comment.* 29,) says, he was considered as the giver of life, sustainer and nourisher of all things, but because they did not see him, they erected no temples to him nor offered sacrifices; however they worshipped him in their hearts, and esteemed him for the unknown God.

We incline to the opinion, that Viracocha was the more ancient deity of the Peruvians previous to the time of Manco Capac, who in remodifying the national religion of the country, exalted the worship of the sun above that of other deities. We shall presently make some observations upon this subject, and state the few reasons we have for making this supposition.

But generally speaking, the sun was the great object of Peruvian idolatry during the dominion of the Incas.† Its worship was the most solemn, and its temples the most splendid in their furniture and decorations, and the common people no doubt revered that luminary as their chief god.

A very remarkable circumstance in their worship of the sun is mentioned by Herrera, (*Hist. Amer.* iv. 348,) and

*The Spaniards consider the word Viracocha, signifies *foam of the sea*, but Garcilazo, who was a native Indian, positively denies this etymology, though he seems to be ignorant of its import, as he gives us no information on the point in question.

† From the account we have given of the origin of the Incas, it is evident they represented themselves to be descendants from the sun, and that it was a part of their policy to represent that luminary as the chief god of Peru. But though this doctrine had prevailed to that degree that the Incas themselves participated in the common delusion, yet the twelfth Inca, Huayna Capac, a man of superior intelligence, by the force of strong natural parts saw reason to doubt the general opinion, and according to Garcilazo, (*Roy. Comment.* 365,) made the following ingenious observation. "There must be some other, whom our father the sun takes and esteems for a more supreme and powerful lord than himself; by whose commands he every day measures the compass of the heavens without any intermission or hour of repose; for if he were absolute and at his own disposal, he would certainly allot himself some time of cessation, though it were only to please his own humour and fancy, without other consideration than that of liberty and change."

other writers, which shews that the Peruvians blended with their solar worship other matters of ancient and significant import. At one of their festivals, when that bloody and consecrated bread was eaten, which we shall presently describe, they exhibited three statues of the sun, each of which had a particular name, which, as translated by Herrera, were Father and Lord Sun, the Son Sun, and the Brother Sun. He moreover says, that at Chucuisaca, they worshipped an idol called Tangatanga, which they said was three and one.

The Spanish writers consider this doctrine to have been one stolen by the devil from our divine religion, and imparted by him to this people. By this opinion they evidently declare its antiquity in Peru to have been greater than the time of the Spanish conquest.

As we can perceive no reason to think the doctrine of the trinity as taught in the Christian religion, was known during the patriarchal or judæical dispensations, we cannot believe that the trinity of the Peruvians, has any reference to that dogma of our religion; and to suppose that christians had reached Peru before the time of Pizarro, is purely a gratuitous hypothesis unsupported by facts of any kind.

We therefore presume their trinity to be founded in those early corruptions of patriarchal history, in which men began to represent Adam, and his three sons; and Noah, and his three sons; as being triplicates of the same essential person, who originally was the universal father of the human race: and secondly, being triplicated in their three sons, who also were considered the fathers of mankind. But as we have already discoursed on this subject, we must refer our readers to page 320, where we have endeavoured to exhibit the Rev. Mr. Faber's views on this curious subject, which we consider explains it very happily.

The moon was considered by the Peruvians as the wife of the sun; and to her sacrifices were made of a similar nature.

The planets, the pleiades, and stars in general, were esteemed handmaids and servants to the moon, and as such received homage.

Acosta (*Nat. and Mor. Hist.* 336,) says, the shepherds worshipped the constellation Lyra, which they imagined to be of the form of a lama, and considered it to exert a guardian influence over their flocks. They supposed other stars or constellations exercised control over serpents; others, over different kinds of wild beasts; and in fact that every animal on the earth was governed by one placed in the heavens, whose form and shape they imagined could be traced among the stars.

Thunder, lightning, and the rainbow, were also objects of religious veneration, and to which sacrifices were offered.

Thunder, or the deity producing thunder, partook of the triplicated character, being known to them by three different names. They supposed it was occasioned by a deity in heaven armed with a sling and club, who held under his controlling power, the rain, hail, thunder, and other meteorological phenomena. (*Acosta, Nat. and Mor. Hist.* 335.)

Acosta further says, they worshipped the earth, the sea, and any natural object that seemed remarkable and peculiar in its character; throwing garments, feathers, food, &c. before it as their offerings. If too poor or destitute to make such donations, they cast a stone in the same manner. It was from this circumstance, that heaps of stone, like the Mercurial heaps of the ancients, have been observed in various parts of the country.

The evil spirit of the Peruvians, was called Cupay, and whose name was always mentioned by them with signs of detestation, and by spitting on the ground. (*Garcilazo, Roy. Comment.* 29.) But we have no intimation given us, in what manner he was supposed to exert his influence; nor are we told whether they ever attempted to propitiate him.

The Peruvians, unlike the Mexicans, made few idolatrous images, except those of the sun and moon. Acosta (*Nat. and Mor. Hist.* 414,) says, that when they celebrated their festival of Yntip Raymi, "they made many images of carved quinnua wood, all attired with rich garments;" but he does not state in what forms these images were made, nor whom they represented.*

Idols of gold and silver, or human figures of those metals, supposed to have been idols, are occasionally found among the ancient monuments of Peru, but we know nothing in reality concerning their use or object.

The Inca Viracocha erected a temple to the god of that name, who appeared to him in a bodily shape, and promised him a great victory over an enemy then encamped in the Peruvian territory. In this temple, an image of stone was placed, representing the god in the dress and manner in which he condescended to be seen. This image (*Garcilazo*, 169,) was that of a man, with a beard about a span long, his clothes reaching to his feet, not wide and full, but something

* Skinner (*Pres. State of Peru*, 259,) remarks that the Peruvians had household-gods, which were called *canopas*, or *guasicamayoc*: (lords of the house.) They also set up stones in their fields and plantations, which were worshipped as protectors of their crops, &c. These stones appear to have been without shape or animal resemblance. I do not know who Skinner's authority was for these statements; they are, however, probably correct.

scanty like a cassock. About his neck, a strange kind of animal was chained, which had claws like a lion, (the jaguar.) One of the links of the chain was placed in the hand of the image.

The Spaniards demolished the temple, and defaced the image, but Garcilazo says, it was to be seen in his time, in its mutilated condition.

Garcilazo (*Roy. Comment.* 30,) declares that in one of the royal apartments (called holy) of the Inca at Cuzco, was a cross made of white marble, whose arms were all of the same size; but he does not state its length. This cross, which was hung up to the wall by a golden chain, was held in great veneration, though it was not worshipped.

As there is no other information given us of this cross, but that it was of greater antiquity than the times of the Spaniards, we cannot undertake to urge any considerations on its use or meaning. But, that it is not an insulated fact in the history of aboriginal America, we refer the reader back to page 322, where we have discussed this subject at some length.

Whatever else we can learn of the religion of the Peruvians, must be derived from the imperfect descriptions that have been given to us concerning their temples, priests, religious festivals &c. which, though but meagre in their details, will enable us to estimate, in a tolerable degree, this part of their institutions.

Though guacas, or temples, were numerous throughout the Peruvian dominions, I have not been able to meet with any description of them, that conveys any just idea of their construction. It would seem that they were all dedicated to the worship of the sun, except in the single instance of the temple erected by the Inca Viracocha to the divinity of that name.

The temple of Pachacamac, that anciently made the valley in which Lima is now built so famous, was not an erection of the Incas, but of a nation or people called Yuncas, who were subdued by them. As Pachacamac is a synonyme of Viracocha, we presume the edifice was consecrated to his service; but as it was not of Peruvian workmanship, we forbear for the present, to speak concerning its plan.

Garcilazo (*Royal Comment.* 87,) informs us the principal temple of the sun was at Cuzco, and that it was built of free-stone; but as he was ignorant of its exact dimensions, he has forebore to make any estimate, and hardly any description of the building. We are unable to supply these deficiencies, but conjecture that this temple, like the palace

of the Inca, consisted of several different buildings, closely assembled together; each building or house, of one story only, and containing perhaps, a single, or at most, but two apartments.

The sanctuary especially dedicated to the sun, was wainscotted with panels of wood, to which thin plates of gold were fastened. The whole of one side of this chamber was ornamented with a figure of the sun wrought upon gold, with rays and emissions of light proceeding from it as it is usually depicted by our painters.

On each side of this image, the desiccated bodies of the deceased Incas were placed, each seated on a stool made of gold.

In an adjoining apartment, was a room decorated with silver, in the same manner as the one just described was adorned with gold. This chamber was dedicated to the moon, as the wife of the sun; and her image, representing a female face, was exhibited on a silver plate fastened to one side of the room. On each side of this plate, the dried bodies of the deceased wives or queens of the Incas were seated.

A third chamber was dedicated to the planet Venus, the Pleiades, and the stars in general. Venus was considered the page of the sun, from being always in his vicinity. The other stars, belonged to the court of the moon, as her attendants. Their apartment was plated with silver, and the ceiling painted to represent the starry heavens.

A fourth apartment was dedicated to thunder and lightning; and a fifth, to the rainbow, which they considered an emission from the sun. For that reason, its representation was adopted by the Incas as symbolizing their affiliation from the same luminary. The apartment consecrated to the rainbow, was furnished with gold, and on the walls, the figure of one was painted in glowing colours.*

There was also an apartment appropriated to the high priest, not as a lodging room, but for holding consultations upon all matters pertaining to their religious system; and various apartments of less note, were allotted for the use of the inferior priests and servants of the temple.

The ground, for about two hundred paces around the temple, was considered consecrated or holy, and no one was allowed to pass within this boundary but with naked feet. Only a certain number of the Inca's male descendants, who

* The Peruvians had a strange conceit, that the rainbow exerted an injurious influence upon their teeth, and therefore they kept their mouths closed whenever one was visible. (*Garcilazo.*)

were ordained priests, could enter the temple; and no female of any rank whatever, not even the Inca's queen, (*Garcilazo, Roy. Comment.* 91,) was allowed this privilege.

Garcilazo also informs us, that there were five fountains or cisterns connected with the chief temple of Cuzco, into which water was conveyed by pipes of gold and silver, brought under ground from springs whose sources were concealed.

Herrera (*Hist. Amer.* iv. 354,) says, there were above three hundred *guacas*, or temples, in Cuzco, though he relates no particulars concerning them. We presume it was from this circumstance, as well as from the ancient celebrity of being the city of Manco Capac, that Cuzco was considered a holy city. Persons who had been there, were held in an esteem similar to that entertained by the Mahometans of their *hadjis*, or persons who had made the pilgrimage to Mecca. (*Garcilazo, Roy. Comment.* 87.)

The most celebrated temple in Peru, after the one at Cuzco, was built on an island in Lake Titicaca, where it was believed Manco Capac and his wife made their first appearance on earth. This legend, together with some other matters of local importance among the adjoining Indians, caused the island to be held in such sanctity, that a temple richly adorned with gold, was erected there to the honour of the sun, and furnished with ornaments of the precious metals to an immense value. The whole surface of the island was considered holy, and its agricultural products were received among the people as consecrated matters, which would ever after protect them from famine or want.

Though the Inca was considered as son of the sun, and therefore at the head of the religious institutions of the empire, he officiated as high priest but on one occasion in the annual festivals of the country, which was at the time of celebrating the principal feast held in honour of the sun.

At all other times, another person performed the duties of high priest, and who was known by the appellation of Villac-Umu. (*Soothsayer or diviner.*) He was always of the Inca's family, and most generally his uncle or brother. (*Garcilazo, 90, 217.*)

The inferior priests were also of the lineage of the Inca, and even the menials whose personal services were required about the temple, were made Incas by privilege, it being contrary to their law, that any one, no matter what his rank or consequence might be, should enter the temple unless of this illustrious parentage.

From this circumstance, we can understand the reason,

otherwise remarkable, that the priests wore no dress to distinguish their sacred office: (*Garcilazo, Roy. Comment.* 32,) for they were already designated by their dress and ornaments, as being of Inca blood, which shewed their exclusive appointment to such functions.

From the dignity and state assumed by the Inca's family, they appear to have been but little familiar with the people at large; and hence we find the "conjuring doctors" of the more rude nations of America, performing their juggling tricks among the commonalty of Peru; a feature in their institutions, which distinguishes them from the Mexicans, with whom we have not been able to detect the practices of these clerico-physicians.

From the account given by Herrera, (*Hist. Amer.* iv. 353,) we presume they practised on the same plan with the conjurers, whose feats we have described, page 105, among the barbarous tribes; but here, under license from the Inca, "who permitted them to assume whatever shape they pleased, to fly through the air whither and as far as they pleased, and to converse with the devil," &c.

The Peruvians sacrificed to the sun, animals of various kinds, such as lamas, rabbits, birds, &c. They also offered to that luminary, the fat of animals, all sorts of eatables, herbs, and even garments of superior quality, which were burned in a fire kindled to the honour of the sun from the bracelet of the high priest, which, it is presumable, was a transparent stone or gem cut into the form of a convex lens.

In general, they simply cut the throats of the victims before they were thrown into the fire; but on certain occasions, they held the animal down to the ground, and cutting the side open they tore out the viscera, from these they augured the success or misfortune of the enterprises, general or particular, in which they were then engaged.

I believe the Peruvians were the only people of America who made divinations from the entrails of beasts, and if Garcilazo's explanation of portentous appearances be correct, they could hardly ever have wanted the comfortable hope of succeeding in their undertakings: for if the bowels of the first animal did not encourage them, they tried a second, and a third, which could hardly fail of suiting them, as the chances of good luck had great odds in their favour even on the most ordinary inspection.

Though Garcilazo positively denies that human sacrifices were permitted by the Inca, yet as Acosta (*Nat. and Mor. Hist.* 380,) and Herrera (*Hist. Amer.* iv. 347, 349,) affirm the contrary, we are inclined to think, that at least, they

were occasionally made, though probably, not to the extent stated by the Spanish writers. The Peruvians were, on the whole, a mild and gentle people, and such sacrifices seem very incongruous with their general institutions.

Their sacrifices appear to have been all made in the open air, in various places set apart for such solemnities, some of which were near the temple, others, in different parts of the city. We shall incidentally touch upon this subject again when we describe their festivals.

They also made a kind of drink-offering to the sun by dipping the tip of the finger into the fluid, and flinging it off in the air towards that planet, and at the same time, raising the hands as high as the shoulder, they kissed towards that luminary, which Garcilazo says was their manner of adoration.

This seems to have been that kind of idolatry alluded to by Job, xxxi, 26, 27. "If I beheld the sun when it shined, or the moon walking in brightness; and my heart hath been secretly enticed, or my mouth hath kissed my hand."*

The Peruvians also pulled out some of their eyebrows and laying them on their hands blew them towards the object of their devotion.

Connected with every temple erected by the Peruvians to the honour of the sun, was a convent of virgins, who devoted themselves to seclusion and celibacy. They were considered the wives of the sun, and were not allowed to speak to any man but the Inca, which privilege it would seem he never attempted to use.

Acosta (*Nat. and Mor. Hist.* 367,) says, these convents were maintained by rents and revenues assigned them by the Inca for support.

At Cuzco, these virgins were solely of the blood of the Inca, none others being admitted into their convents, and these only when under eight years of age. In the different provinces of the empire, similar societies of virgins were attached to the temples of the sun located there; but they were not of the royal blood, but the daughters of *Curacas*, and nobility, and other females distinguished for their gracefulness and beauty. These provincial virgins were considered as wives to the Inca, if he chose to select them; but if ever they had been thus honoured, they were incapacitated to return to the convent. The other virgins, after reaching a good old age had permission to return to their families with certain honourable privileges, if they preferred so doing to remaining in the convent.

* The practice of kissing the hand in adoration, also prevailed among the Egyptians, Greeks, Romans, &c. (*Potter's Antiq.* i. 244. *Banier, Myth.* i. 186. *Gale, Court of Gent.* i. lib. ii. 111, 112.)

These virgins of the sun, whether at Cuzco or elsewhere, took no part in the religious worship of the country, but seem to have been chiefly employed in manufacturing clothing and ornaments for the Inca and his queen. They also made those fine garments that were burned to the honour of the sun, and that kind of bread called *Cancu*, which was offered to that luminary at the great festivals of which we shall presently speak. They also made the drinks used by the Inca and his family on solemn occasions.

They constantly preserved at the convent of Cuzco, a perpetual fire, which if it happened to be extinguished was supposed to indicate a visitation of heavy calamities.

Garcilazo says, that if the virgins of the sun transgressed their vows of chastity they were buried alive. The man connected with them was hung, and his kindred stoned to death.

In the history of the virgins of the sun, we recognize a system that has prevailed, perhaps, every where among the ancient idolatrous nations who had attained a certain degree of civilization. We have already discoursed on this subject in our observations on the celibates of the Mexicans, to which we refer for the general analogies. It must be observed, however, that celibacy in convents or nunneries, appears to have been peculiar to females alone among the Peruvians. They therefore more closely resemble the vestals of the ancient Romans, and those of the Scandinavians, whom Mallet (*North Antiq.* i. 125,) thus describes: "the goddess Friga, was usually served by kings' daughters, whom they called prophetesses and goddesses: these pronounced oracles, devoted themselves to perpetual virginity, and kept up the sacred fire in her temple."

Though the Peruvians celebrated various festivals during the year and especially at the time of every new moon, yet Garcilazo and Acosta pass them over without any description, excepting the four that appear from them to have been their principal feasts: these we shall now attempt to describe in a brief yet exact manner.

Though the Peruvian festivals appear to have been regulated by the apparent motions of the sun towards the equinoxial and solstitial points, yet our authorities have not treated of them in that order, but according to their relative degrees of importance and solemnity. Hence, when we speak of the first, or fourth festival, they are to be considered in that light, and not as marking their succession to each other in point of time. We shall attempt to correct this bad arrangement, by stating as near as possible the time of the year at which they were celebrated.

Their first, or principal festival, was celebrated according to Garcilazo (*Roy. Comment.* 217,) soon after the summer solstice, (June,) in honour of the sun, and was called by them *Yntip Raymi*. At this time they acknowledged the sun to be their sole and universal god, by whose light and heat all living creatures were generated and sustained. They also commemorated the Inca Manco Capac and his wife as having descended from the sun for the benefit of mankind.

The Inca, at this festival officiated as high priest, which was the only time during the year that he exercised this function.

The principal curacas, and officers of the government, and as many other persons as could possibly attend, assembled together at Cuzco at this time. They were dressed in their best and finest clothes, and otherwise adorned with jewels, plates of gold, garlands, &c. as far as the law permitted their use.

They also dressed themselves in a grotesque manner with the skins of wild beasts, with the wings of the condor, &c. Others, in the language of Garcilazo, "appeared in antic shapes, with horrid visors;* and to make themselves the more ridiculous, entered with grimaces, making mouths and turning themselves into a thousand fantastical gestures like fools or madmen, carrying flutes and ill-tuned cymbals, without music or harmony, which served to make up their wild masquerade."

The curacas bore weapons of various kinds, and certain military insignia or badges which denoted their valour in war; and each one endeavoured to excel in state and magnificence of appearance.

For three days they fasted in the most rigorous manner, barely using maize and water sufficient to support life. On the evening of the third day, the virgins of the sun made from the meal of bruised or ground maize, a great quantity of that sacred bread called *Cancu*, which was alone used at this festival, and the one called *Citua*. Garcilazo says, that the *cancu* bread was sometimes mingled with the blood of children, drawn from various parts of their bodies; but that at other times, it was a plain bread, which I presume, was the case at this festival, for it is said to have been the first dish served up at the banquet made at this time. We shall hereafter speak of the other kind of *cancu* bread.

On the next or fourth day, every thing having been duly

* Ulloa (*Mem. Philos.* ii. 98,) says of the Peruvian masks, "Ils sont réellement si laids, sans cependant offrir rien de monstrueux, que ceux de l'Europe ne peuvent pas y être comparés, quelque ridicules qu'on ait pu en imaginer."

prepared, they assembled at daybreak in the public square of the city, to await the rising of the sun, which as soon as visible, they adored by squatting down "and with open arms and hands lifted up, putting them before their mouths, threw empty kisses into the air, and with profound reverence acknowledged the sun for their god." (*Garcilazo, Roy Comment.* 219.)

Then the Inca, taking two golden cups, filled with a liquor drank commonly by them, in the name of the sun, as his eldest son, gave a small portion of the contents of one cup to each of his lineage present. The other cup was emptied into a stone channel that led to the temple, and was considered by them to have been drank by the sun.

The curacas and nobles drank in a similar manner, but not from the Inca's cup, or of the liquor prepared for him.

After this sipping, rather than drinking, the Inca and certain persons of his family entered into the temple and made their offerings to the sun, which appear to have been representations of all kinds of animals made from gold and silver, and vessels of similar materials. As only these privileged persons could enter the temple, the curacas made their offerings by their hands.*

After this had been done, every one retired to a proper place, and the Inca selecting a perfectly black young lama, sacrificed it in the manner we have already described in a preceding page, and from the inspection of the viscera, augured the prosperity or adversity of the ensuing year; which, as we have already observed, could hardly fail of being auspicious.

After this first animal had been thus sacrificed, numerous others were offered, but not in the same manner with the first. Their throats were cut, the skin taken off, and the blood, heart and entrails being cast into a fire, were consumed to ashes together with the whole body of the lama first sacrificed. The bodies of the other animals appear to have served as the materials of the ensuing banquet.

This sacrifice was therefore a real holocaust, which, though so frequent among the ancient pagans of Asia and Africa, does not appear to have been in use among any of the demi-civilized nations of America but the Peruvians.

The fire for these sacrifices, was kindled from the sun by

* We must observe, that unless the male members of the Inca's family had been especially ordained to make these offerings, they were obliged to use the services of those that had received this power. I presume, however, this function might be exercised by any of the Inca's lineage who chose to be ordained, though he could not officiate from the mere circumstance of his royal birth.

means of the bracelet of the high priest, held over a "cylinder of the bigness of a half orange, bright, and well polished, which uniting the rays of the sun in one point, cast such a reflexion into the cylinder, as easily set fire to the cotton" prepared for this purpose.*

Portions of this fire were carried to the temple of the sun, and the convent of the virgins, to be preserved there for the ensuing year; and in case it happened to be extinguished was regarded as a most unhappy omen.

If the day happened to be cloudy, this fire was kindled by rubbing two sticks together, which however was considered an unfavourable circumstance, "as the sun seemed as it were to hide his face from them in displeasure for some offence committed."

After the sacrifices had been performed, the whole people partook of a banquet, in which the first dish was of that sacred bread called *cancu*, which had been prepared by the virgins of the sun as already stated.

After the people had eaten, they set down to hard drinking, to which vice, says Garcilazo, they were notoriously addicted. While this carousing lasted, songs were sung, and dances made, in which, according to Garcilazo, "all nations presented themselves in their masquerades, and colours, and antic postures, according to the fashion of their country."

This feast of Yntip Raymi required nine days for its celebration, after which every one retired home and to his proper avocation.

At this festival Acosta (*Nat. and Mor. Hist.* 411,) says, they produced publicly three figures or statues of the sun, which they called father sun, son sun, brother sun. Garcilazo does not mention this circumstance in his account of this festival, and on another occasion says, this conceit of a trinity was but the fancy of the Spaniards. It is not easy, however, to set aside the positive declaration of Acosta, an earlier writer than Garcilazo, and who attributed the device to an imitative ceremony of the devil. He would not therefore have made the statement he has given, without circumstances appearing to make the matter remarkable. For our observations on the Triads of the American Indians, see page 320.

The second festival described by Garcilazo, was the one in which the youth of the Inca's family underwent some severe probationary exercises, testing their ability to endure hunger,

* Plutarch, in his life of Numa, says, the sacred fire of the Romans was kindled from the sun by concave vessels of brass, which reflected the rays on one central point and kindled such light and dry matters as were placed in the focus.

fatigue, &c. We have already described the nature of their trials at page 372, and which appear to be exclusively military in their nature and involving no principle of religion.

We are not informed at what time of the year this festival was celebrated, though indeed from Garcilazo's history it would seem to be fixed to no period of time; for he relates that it took place "every year or two, more or less, according as it was judged convenient."

The third festival, which was called *Cusquieraymi*, was celebrated about the time the maize and other plants sprung up out of the ground, when they sacrificed many animals to the sun, entreating him not to permit the frost to injure their agricultural productions. This festival renewed the dances and drinking of the Yntip Raymi, and as we have described at that feast, the bodies of the animals sacrificed, were distributed among the people for their food and entertainment.

Garcilazo relates no particulars further of this festival than we have here stated; indeed, our description is hardly more concise than the one he has given.

The fourth festival of the Peruvians, was called *Citu* or *Citua*, and was held on the first day of the moon after the autumnal equinox, (September) and seems for the most part to have been of the nature of the ancient lustrations.

It was preceded by a rigorous fast of several days, during which time they abstained from all commerce with their wives.

On the vigil of the feast, they made the sacred bread called *cancu*, which was formed into balls, and being put into a dry pot was then half baked. But according to Garcilazo (*Roy. Comment.* 258,) at this festival the *cancu* bread was made in two different ways. The first kind, was a simple bread, made from the meal of Indian corn with water. The second kind, was moistened with the blood of children from five to ten years of age, which they drew from the veins of the arm, or between their eyebrows and noses. It appears that this bread was not made exclusively by the virgins of the sun, but by the people at large, who compounded and baked it at the house of the eldest male member of their respective families.

On the ensuing morning, but some hours before daybreak, all those who had previously prepared themselves by fasting, arose from their beds, washed their bodies, and taking a lump of this half baked bloody bread, applied it to their head, mouth, and other parts of their bodies, as if by so doing they purified themselves from all their infirmities.*

* In this account, we have copied Garcilazo, as we have derived all the minutiae of this festival from him, and could not well interrupt the relation

This being done, the eldest person of the family, affixed some of the bloody *cancu* on the lintils of the door next to the street, to designate they had performed their purifications.

In like manner, the high priest performed the same ceremonies at the temple of the sun, and designated other priests to perform the same rites at the convent of the virgins of the sun, and at other places accounted holy and sacred by them.

At the Inca's court, the ceremony was performed by the eldest uncle of the Inca.

As soon as the sun rose, the people adored him, and besought him to deliver their city from outward calamities and internal diseases. They then broke their fast with the bread made without blood, which they attempted to do simultaneously throughout the kingdom, so that the act of adoration might be general at the same instant of time.

Immediately afterwards, one of the blood royal sallied out from the fortress of Cuzco, richly attired, to represent a messenger from the sun; bearing a lance in his hand ornamented with a wreath of feathers of various colours, extending from the point to the butt. In this manner, he ran to the market place, where he met four persons, also of the Inca blood, who each bore lances in their hands. He then touched the point of their spears with the one he carried, and told them, that the sun commanded them as his officers to purify and cleanse the city.

With this commission, the four persons departed, running through the principal streets of the city, and as they passed along, men, women, and children stood at the doors of their houses making great acclamations, shaking their garments as if they would beat out the dust, and rubbing their hands over the different parts of their bodies, as if washing off their persons, all disease and sickness, which they expected would be expelled from the city, by the persons armed with lances who passed along the streets.

By a repetition of these ceremonies, and a succession of persons relieving one another in this lustration, they ultimately purified the city and its vicinity, until they had attained a distance of several leagues, when fixing their lances

by the account of Acosta, who says, (*Nat. and Mor. Hist.* 392,) the Peruvians, eat a morsel of this bloody bread, protesting they would neither do nor think any thing against the sun nor the Inca, &c.

We consider the statement of Acosta correct; and the mere circumstance of its being bread, shews it was intended to be eaten. If it had been used as a purifier simply by rubbing the body, they would no doubt have made it an unguent.

in the ground, they considered they had thus formed an impassable boundary to all disease and ill luck, that might otherwise have ravaged their city at pleasure.

When night came, they lighted great balls or torches of straw, close and hard twisted together that they might be a long time burning. These balls or torches, which were about the size of a foot ball, were tied to short pieces of cord, by which when set on fire, they could be whirled about through the steets, and in this manner they expelled the nocturnal plagues and evils, as the diurnal ones had been driven out by the lances.

After passing through the city with these fire balls, they were then thrown into some running stream, which, carrying them along its current, bore off every evil and accident that was not restrained by the *cordon sanitaire* of the lances already described.

The Indians would upon no account approach one of these fire balls, which, being extinguished by the water in which it was cast, might happen to be entangled in the weeds or bushes along the shore; for they apprehended they should be afflicted by those diseases and evils which had been thus driven out of the city.

In the celebration of this festival *Citua*, we perceive the same singular practice of eating a consecrated bread made with blood, which we have previously ascertained was a religious rite of the Mexicans, and people of Nicaragua. As we have already discoursed on this subject, we shall not again repeat our observations, but refer the reader to page 240, where he will find that analogous ceremonies have been also observed in various parts of the eastern continent.

In the purification of their city from calamities and evil fortune, we perceive one of those varied forms of lustration, to which most pagan nations have resorted, under the superstitious idea of procuring health and immunity from dangers and accidents for the ensuing year, or other periods of time. In the practice of setting fire balls adrift in the river charged with "nocturnal plagues and evils," some fanciful theorists, who derive the Indians of America from the Jews, see an imitation of the release of the scape goat in the wilderness! This notion is so extravagant that it does not require any refutation. Many ancient pagans of the eastern continent, have made use of superstitious practices conformable with the Peruvian ceremony, and which indeed, implies nothing in its character so arbitrary, but might be very naturally adopted by any heathen people believing in charms and witchcraft.

Without quoting at large on this subject, we will simply make the following extracts, as substantiating our general observations and furnishing at the same time analogous superstitions.

The Biajus, natives of Borneo, (*As. Res.* x. 216,) in performing their offerings to the god of evil, launch a small boat into the sea, loaded with all their sins and misfortunes, which are imagined to fall upon the crew of the first vessel who are so unlucky as to encounter it at sea.

In certain parts of Hindustan, (*As. Res.* ix. 97,) the superstitious natives place an earthen pot on the river with a lamp in it, which they send adrift laden with their sins.

We have now, as far as our means allowed, exhibited to the reader whatever seems characteristic in the institutions of the empire of the Peruvian Incas, with such commentary and illustration as appeared necessary to elucidate the subjects of our investigation. Having closed this part of our inquiry, we shall proceed to examine the traditions they relate of their earlier history, and those concerning Manco Capac, the great founder of their religion and national polity.

On the Traditional History of the Peruvians.

There is no tradition among the Peruvians that we are aware of, that gives any account of their having ever emigrated from other lands, to those countries in which they were found by Pizarro, and the cruel band of spoilers that obeyed his commands.

The relation they give of the origin of their nation and government, as might be naturally expected, is obscure and in some particulars contradictory. We have in the introductory pages of this chapter, taken the account given by Garcilazo de la Vega of these matters, who being of the blood of the Incas, and living just after the destruction of their empire, might be supposed the best authority for the early history and antiquities of his country; and such we presume, he ought to be considered. But with all the advantages that Garcilazo enjoyed, he was neither a good antiquarian nor historian, nor did he perceive what were the subjects to which he should have chiefly directed his inquiries. This may be explained, perhaps, in those sentiments of contempt, which were pretty universally felt by the Spaniards for the institutions and polity of the American Indians. The abusive commiseration they expressed for their

idolatry and superstition,* would naturally dampen any attempt to investigate the history and antiquities of Peru, though every advantage and facility was afforded for such an undertaking.

The Spanish writers who have treated of the conquest of the Peruvian empire, have touched upon such subjects no further than seemed necessary to illustrate their own nefarious history. Their military operations being involved with events of local importance, sometimes required the explanation of such matters of custom or history, which either advanced or retarded the progress of their arms. But all other subjects that did not relate to themselves they considered insignificant and unworthy of notice.

It is in vain, however, that we regret the omissions of the earlier Spanish historians of Peru. Three centuries have elapsed since the downfall of that empire, and every interesting particular of their traditional history, or of their antiquities, has long since been forgotten, excepting those imperfect accounts preserved by a few individuals, who wrote chronicles of passing events in the first half century of Spanish domination. All that we now can do is to combine what they may have recorded, and thus endeavour to regain as far as possible an idea of the antiquities and history of Peru at the time of the Spanish conquest.

Besides the relation given by Garcilazo, introduced in the first pages of this chapter, concerning Manco Capac and the origin of the Peruvian empire, there are some traditional histories preserved in the great work of Herrera on these subjects, which are in greater detail, and in some particulars entirely different from those related by Garcilazo. They are as follow, (*Herrera*, iv. 283, &c.) The Peruvians reported they had received it by tradition from their ancestors; "that many years before there were any Incas, at the time when the country was very populous, there happened a great flood; the sea breaking out beyond its bounds, so that the land was covered with water and all the people perished. To this the natives inhabiting the vale of Xauxa, and the natives of the province of Collao, add, that some persons remained in the hollows and caves of the highest mountains, who again peopled the land. Others of the mountain people affirm, that all perished in the deluge, only six persons being saved on a float, from whom descended all the inhabi-

* Acosta, who was certainly superior in many respects to the generality of the earlier Spanish writers on America, after having given a most meagre account of the historic traditions of the Peruvians, stops short, and observes; "But what availeth it to speak more, seeing that all is full of lies, and vanity, and far from reason."

tants of the country. That there had been some particular flood may be credited, because all the several provinces agree in it:* they also concur in saying, that after their re-peopleing they lived in a disorderly manner; most went naked, very few wearing short jerkins, but that the *Llautos* or wreaths they had on their heads to distinguish their several extractions, were then used, and that they wandered about in clans, without having any houses or settled dwellings, except only some caves; and others made strong holds on the highest hills, whence they sallied to fight with their neighbours for the tilled lands, &c. Thus they lived like free clans, but still in a barbarous manner, as was practised by most other nations in that part of the world.

At the time that this state of society existed as we have just stated, a very brave man named Zapana, started up in the province of Collao, who subdued a considerable part of it: and the Indians say, the war was carried on against him very resolutely by some women in the province of Canas, who for their defence made several walls of dry stone, trenches, and forts, of which there are some ruins to be seen at this day. Those women having done wonders, were at last vanquished by Zapana, and their name forgotten.

They further tell us, that there were white and bearded men in the islands of the great Lake Titicaca in the province of Collao; that a chieftain named Cara, marching from the vale of Coquimbo, came to Chuquito, and going over to the island killed all those bearded people: but notwithstanding all these wars, the country being healthy and abounding in the necessaries of life, it grew very populous, and chiefs arose who tyrannised over the towns and provinces.

Another tradition is, that in former times they were long without seeing the sun, but that after many prayers and vows to their gods, the sun came out of Lake Titicaca, and the island that is in it, and presently afterwards there appeared to the southward a *white man* of large stature and of venera-

* Garcilazo (*Roy. Comment* 95,) alludes to this deluge in his account of the island and temple in Lake Titicaca, but he does not state any particulars.

Zarate (*Hist. Cong. Peru, chap. 10, lib. 1.*) relates a Peruvian tradition of the deluge, in which a curious particular has been preserved though corruptedly. His words are: "the Indians related there had been once a flood, during which time men saved themselves in great caverns, which they had constructed for this purpose upon lofty mountains, and to which they had carried every thing necessary for the support of life. When they entered these caverns, the entrances and even the smallest fissures were so perfectly closed that the waters could not penetrate them. When they considered that the waters had diminished, they thrust out some dogs, who returned to them wet, but without being soiled with mud; by which they perceived that the waters were still so high that they did not dare to leave the caverns, until they found their dogs again returned to them foul with mud."

ble aspect, whose power was so great that he brought down mountains, raised the vallies, and made water spring from the rocks, whom for that reason they called the beginning of all things created, and father of the sun, &c.; that after having wrought these wonders he passed on to the northward, and in his way gave men rules to live by, advising them to be good and to love one another. This personage was called by them Ticeviracocha, and to his honour they erected temples and idolatrous statutes.

Sometime afterwards, another person came like the former, who healed the sick, gave sight to the blind, &c. The people of Canas, however, for some reason not assigned, attempted to stone him, but fire appeared from heaven to aid him, which frightened them so much that they cried out to him to deliver them from the impending punishment. After this, he went away to the sea shore, and spreading his mantle on the waves was carried away on it, and was never seen again, for which reason he was called Viracocha.* *Foam of the sea.*

The Peruvian traditions further relate, that at Pacaritambo, (*house of production*) not far from Cuzco, there appeared three men and three women, all clothed in long mantles, and short coats without sleeves or collars. The men were called Ayarache, Aranca, and Aiarmango, and the women Mamacola, Mamacona, and Mamaragua. Ayarache had a gold sling with a stone in it, which was a most wonderful weapon, for with it he could throw down hills, and place stones in the clouds. These men were very haughty and assumed an authority over the country, and Ayarache, with the consent of the others founded the town of Pacaritambo, at which place much gold was collected. Ayarache's brethren, envying him, deceitfully persuaded him on some pretext to enter a cave where their treasure lay, and when he had gone in they immediately closed its mouth with stones. When Ayarache was thus shut up, the two brothers resolved to erect another town with some people that joined them, which they called Tamboquiuro. (*Teeth of the palace.*)

After this time, it is reported, that the two brothers saw, to their great terror, Ayarache flying through the air with large painted wings, but he telling them not to be dismayed, informed them that he would soon establish the empire of the Incas, and directed them to remove to the next valley and found the city of Cuzco, which should become a great

* We have already stated, that Garcilazo denies the Spanish translation of the signification of this word; though he has not informed us of its real meaning.

city, and that there a great temple should be built to the sun, and that as much as he was to pray to God for their grandeur, he would remain in the same shape they then saw him, on a hill, that was to be for ever worshipped by them and their descendants; that it should be called *Gunacaure*; where in return for his kindness, they should erect altars, and offer sacrifices to him, and to render them formidable to their enemies, he directed them to bore their ears as his were. They promised to do all he required, and went to the hill where they saw him again and received other instructions. Some little time afterwards, Ayarache and Aranca were transformed to stones shaped like men, and then Aiarmango with the women went and founded the city of Cuzco, and he assumed the name of Manco Capac."

The account related by Acosta of the origin of the Peruvians, is extremely brief, and yet contains particulars of much importance in our investigation. It is also a good specimen of the manner in which the first Spaniards wrote concerning the antiquities of the aboriginal nations of America. "It is," says he, (*Nat. and Mor. Hist.* 79,) "no matter of any great importance, to know what the Indians themselves report of their beginning, being more like unto dreams than to true history. They make great mention of a deluge that happened in their country; but we cannot judge if this deluge were universal, or some particular inundation of those regions where they are. Whichsoever it be, the Indians say, that all men were drowned in this deluge; and they report that out of the great Lake Titicaca, came one Viracocha, which stayed in Tiahuanaco, where at this day, there is to be seen the ruins of ancient and very strange buildings, and from thence came to Cuzco,* and so began mankind to multiply. Others report, that six, or I know not what number of men came out of a certain cave by a window, by whom men first began to multiply, and for this reason, they call them Pacaritambo."

In the preceding extracts from Herrera, Acosta, and that from Garcilazo, at the commencement of this chapter, is contained every particular we have been able to collect concerning the traditional origin of the Peruvians, and of Manco Capac, the great legislator and founder of that social and religious system, which eventually rendered them so eminent among the nations of South America, at the time of the Spanish conquest.

*Acosta, page 473, says, seven persons came forth from this cave. The reader will please compare this statement with what has been said in page 263, on on the remarkable use of this number.

The traditions we have extracted, agree in general in their prominent features: and any discrepancy between them, is not of sufficient importance to require an attempt to make them more harmonious.

Setting aside the gross, and evidently fabulous incidents there stated, these traditions hint of curious and interesting particulars, which require investigation not only on their own account, but as being the principal materials upon which we must rely while examining the very obscure history of Manco Capac; and from whence we may suppose him to have been derived.

The more important points involved in the Peruvian traditions, are these: They commence with accounts of that deluge, whose destructive effect upon the human race, forms an important epoch in the early history of almost every people. They also distinctly relate, that the reproduction of mankind, and formation of civil societies, had taken place anterior to Manco Capac, and that during these remote periods of time, notices are given of the achievements of heroes and Amazons, of benevolent missions, of philanthropic men or gods, and of bearded whites; all of which, involve matters of curious speculation.

As it is a matter of no consequence which of these different subjects we first investigate, we shall proceed with the history of Manco Capac. Neither Garcilazo, nor any of the Spanish writers, assign this personage a greater antiquity than about four hundred years before the arrival of the Spaniards; and as his history, though imperfect, is sufficiently well connected with that of his descendants and successors, I apprehend, he was not a mythological hero of uncertain ages of history, but a talented individual, who had art and knowledge sufficient to establish himself king and priest over the Peruvians near Cuzco; from whence he and his successors gradually enlarged their dominions to that of a mighty empire.

That the demi-civilization of ancient Peru was exclusively derived from his genius and talents, I am much inclined to doubt; for a state of demi-civilization perhaps equal to that established by him, may be inferred to have existed in this kingdom at an earlier period than that in which his history commences. It also appears, that other nations not conquered by the Incas until more modern times, had a similar religious system, at least, in some particulars, and they erected temples, and other monuments, not inferior in magnitude of undertaking to those universally attributed to the Incas.

In the tradition we have extracted from Acosta, mention is

made of Viracocha having stopped at Tiahuanaco, when on his journey from lake Titicaca to Cuzco. Now, whoever this personage may have been, he is by every writer made more ancient than Manco Capac; and if he visited Tiahuanaco, this ruined city is of an earlier foundation than the time of the Peruvian legislator. Such, indeed, was the tradition of the natives, according to Garcilazo, who at any rate, establishes its erection independent of the Incas, not only by his relation, but by communicating the fact, that Tiahuanaco, then in ruins, was not conquered until the time of Mayta Capac the fourth Inca. (*Roy. Comment. 55.*)

We shall extract from Garcilazo a description of these ancient ruins, which though most probably exaggerated in some particulars, will nevertheless substantiate the claim of its unknown founders to a demi-civilization not inferior to that of the Peruvians. The relation is to be found in Garcilazo, *Royal Comment. 55, &c.*

"Among the mighty works and buildings of that country," (at the outlet of lake Titicaca) "there is a certain hill or heap of earth thrown up by hand, which is so high that it is a subject of great admiration, and least with time it should settle or sink lower, it is founded on great stones cemented together. And to what end this was done no man can conjecture, unless it were like the pyramids in Egypt, to remain for a trophy of the greatness of that monarch who erected it. On one side of this mighty heap, are the statues of two giants cut in stone, with long robes to the ground, and wreaths or binders about their heads, which being much impaired by time shews the great antiquity of them. There is also a strange wall to be seen raised with stones of an extraordinary bigness, and what is most wonderful to consider, is, how or in what manner they were brought hither by force of men, and from what place they were brought, there being no rocks or quarries but such as are at a far distance from thence. There appear also many great and lofty edifices, and what is more strange, there are in divers places great portals of stone, and many of them whole and perfect, made of one single and entire stone, which being raised on pedestals, are found by those who have measured them to be thirty feet in length and fifteen in breadth,* which pedestals, as well as the arches of the portals, were all of one single stone.

"The natives report, that these buildings, and others of the like nature not mentioned here, were raised *before the times of the Incas*, and that the model of the fortress of Cuzco was

* Acosta, 460, says, he measured some stones at Tiahuanaco, and found one of them 38 feet in length, 18 broad, and 6 in thickness.

taken from them. Who they were that erected them they do not know; only, they have heard say by tradition from their ancestors, that those prodigious works were the effect of one night's labour, which seem to have been the beginnings only and foundations for some mighty structure. Thus much Pedro de Cieca in his remarks concerning Peru and its several provinces relates, to which I shall add what a certain priest called Diego de Alcobaca relates, who was my school-fellow, &c. This person in speaking of the ruins of Tiahuanacu, has these words, 'in Tiahuanacu, which is a province of Collao, amongst many other antiquities worthy of immortal memory, there is one particularly famous adjoining to that part of the lake which is called by the Spaniards Chucuytu.* This is a pile of monstrous buildings, to which is an open court of fifteen yards square every way, the building is two stories high, and on one side of this great square is a large hall of forty-five feet in length and twenty-two in breadth. The covering appears to be thatched like those on the temple of the sun at Cuzco. All this court or yard which we mention, with the walls, floors, hall, roof, portals and jambs of the doors, and back gate to this building, is all of one entire stone, hewn out of a rock; the walls of the court and of the hall are three quarters of a yard thick, and such also is the roof, which though it may seem to be thatched with straw, is yet of stone; for the Indians have worked it so artificially, that the stones appear like straw laid in the most curious manner of thatch. The waters of the lake beat against the side of these works, and both this and all the other edifices hereabout, were all as the natives report, dedicated to the maker of the universe. Moreover, besides these works, there are divers figures of men and women, cut so naturally in stone that they seem to be living. Some of them are drinking with cups in their hands, some are sitting, some standing, some are walking in the stream which glides by the walls; other statues there are of women carrying children in their arms and in the folds of their garments; others, with them on their backs, and in a thousand other manners and postures. The Indians of these days report, that for the great sins of that people, in having stoned a stranger who passed through their province, God in his judgments converted those men and women into stone.' These are the words of Diego de Alcobaca, who hath been Vicar-general of many provinces in that kingdom, and preacher of the Indians; for being a native of Cuzco and of Spanish and Indian blood, and consequently acquainted with the Indian languages, and in all probability he was the most likely

* Chucuytu, is the south-west shore of lake Titicaca.

man to deliver the most true and authentic relation of these countries." (*Garcilazo*, 55.)

In other parts of Peru, also, monuments were found concerning which the tradition of the natives was, that they belonged to an age more ancient than that of Manco Capac. Herrera (*Hist. Amer.* v. 182,) takes notice of some large structures near Guamanga, about half way between Cuzco and Lima, "which the Indians say, were built by white and bearded people who were in the country before the times of the Incas, and they are of a different form from those constructed by the Incas."

We also perceive that the Yuncas on the sea coast near Lima, held in common with the Peruvians the religious worship of Pachacamac, the supreme God. Garcilazo expressly says, that the Yuncas "admitted and received prior to the time of the Incas, the same doctrine concerning Pachacamac that was entertained among the Peruvians;" and goes on to state, that this temple, the only one dedicated to that divinity in all Peru, was of great celebrity among the neighbouring people. "It was built before the times of the Incas, and was very magnificent for the structure." (*Garcilazo, Roy. Comment.* 234.)

Don Ulloa (*Mem. Philos.* ii. 74,) says of this temple, "we see now nothing but ruins fallen down, with some few parts yet standing. It is divided into three parts; namely, a palace, a fortress, and a temple or place of prayer. Rude as this edifice appears, we may yet perceive an air of grandeur and magnificence that attests that of the princes who formerly built it."

From the similarity of these ruins to Peruvian monuments, Ulloa has supposed, without any other reason, that the Incas after conquering the country had embellished the original temple of the Yuncas. But as nothing on this subject is related by any Peruvian author that I have met with, there seems to me no just ground for such a conjecture.

In the plain on which the city of Truxillo is built, was established, independent of the Incas, a monarch called by the Spaniards the *Chimo* or *Chimu*. Herrera calls him "a potent lord." This prince was not subdued until the time of the tenth Inca. Stevenson (*Trav. S. Amer.* ii. 121,) says, the ruins of the ancient residence of the Chimu are yet to be seen near Truxillo, "they appear like the foundations of a large city, or the walks of a garden crossing each other at right angles, and denote the residence of the numerous tribe which formerly inhabited this site, and prove also that their chief had a respectable force at his command."

In the *huacas* or tombs, that have been opened in this vicinity are found the same ornaments, implements, and manufactures, that have been taken from those of undoubted Peruvian origin. It was from a tomb at this place, the great treasure described in the note to page 363 was taken.

It is not deemed necessary to multiply extracts further to prove, that a certain degree of demi-civilization prevailed in the nations adjoining the Peruvian empire, which was not derived from their communication with the latter. We therefore shall take no notice of the Cyclopean architecture of Lagunilla or Paramonga, described by Stevenson, (*Trav. S. Amer.* ii. 22, 169,) for we consider enough has been said to justify the hypothesis of a preceding page, that in a more remote age than any tradition of Peru has reached, civilization to a certain degree had been established among the nations of this kingdom, but which had been broken in upon or had been nearly overwhelmed by some invasion, pestilence, or calamity, unrelated by tradition. Then it was, we suppose, that certain individuals, among whom the most conspicuous was Manco Capac, by policy and art again assembled fragments of tribes and people, and re-established a system of politics and religion, that continued until the arrival of the Spaniards; a period of time, according to the best writers, of about four hundred years. (*Garcilazo*, 14.)

It is presumable that Manco Capac was not from a country foreign to America, but most probably was a priest from the neighbourhood of lake Titicaca,* where his history seems to commence according to Peruvian tradition. The signification of his name *Manco*, does not appear to have been known even to the latter Incas, according to the relation of Garcilazo, who was of that lineage.† I presume, however, it was significant of regal or priestly dignity, or possibly of both senses combined; for we learn that the Yuncas, who built the temple of Pachacamac "before the times of the Incas," had a monarch named Cuyis-mancu, impliedly a compound name, when subdued by the Peruvian Incas; and in a neighbouring district conquered at the same time, the sovereign bore the name of Chuqui-mancu; see Garcilazo, Roy. Comment. 232, 234, &c.

* Lake Titicaca, according to Garcilazo, (p. 40,) was highly revered by the people on its shores. "The Collas, who consist of many nations, report, that their first parents issued from the lake, and before the times of the Incas they offered sacrifices to the lake upon its banks."

† Garcilazo, (p. 21,) says, "Manco, is but the proper name of a person, and in the common language of Peru hath no signification, though in a particular dialect which some of them have, (which as some write me from Peru is entirely lost,) it signifies something as all the other names and titles did which they gave to their kings."

The word *Capac*, is an appellative in the Quichua language signifying *rich in virtues*, or as we should understand it according to our English idiom, *illustrious*.

I apprehend we shall not be able to ascertain more of the history of the Peruvian legislator, than what we have related in the preceding extracts, which, though very deficient in particulars, may be deemed sufficiently explicit to save us the trouble of looking for his original country elsewhere than in South America.

We are unable to offer even a conjecture concerning those personages of ancient Peruvian tradition, known by the names of *Zapana*, *Tice-viracocha*, and *Viracocha*; or whether they were real individuals or mythological heroes whom a series of ages had invested with certain attributes of divinity. They, at any rate, belong to times anterior to Manco Capac, and which lie overwhelmed with impenetrable darkness.

We cannot, however, entirely dismiss these traditions without calling the reader's attention to certain particulars therein related, which excited no little surprise when we first perused them. These subjects are those *women*, who, like the Amazons of old, contended with men in war; and those *white men*, and *men with beards*, to whom a direct reference is made on more than one occasion.

From some cause or other, perhaps impossible for us to conjecture, the story of a nation of female warriors has been found to prevail in different parts of South America, and the greatest river of this continent, has received a name from the supposition that they were established somewhere on its banks.* Their country, however, has never yet been ascertained, and we may without hesitation consider the whole story a ridiculous, though unintentional exaggeration, of the first Spanish invaders of South America. But as such a belief has prevailed, it may not be amiss at the present time, when we find something of a similar story, to inquire what distortion of facts could have given rise to so improbable a relation.

The most direct solution seems to be, that in one or more instances when the men of the nation or tribe had been cut off by war, that the women in despair, may have resisted the

* Orellana in his famous voyage down the Amazon river, speaks of Amazons, but according to Herrera, v. 261, it does not appear, that the Spaniards of that expedition saw above ten or twelve women mingled among the men, and acting as commanders, &c. As to the stories he collected from the Indians on this subject, Herrera observes, "that Orellana having owned before, that he did not understand those Indians from whom he received this information, it is not likely, that in so short a time he could compose such a copious vocabulary, as to understand all the particulars he has related."

invasion of an enemy with more courage than might be naturally expected, or perhaps, if women were secured by natural or artificial defences, they may have frustrated or even defeated men who had destroyed their husbands and sons. The story also may have arisen from the circumstance, that the men of some nation who had experienced defeat and captivity, were afterwards contemptuously designated by the victors as women. This indeed, we know to have been a practice among some of the North American tribes, and if we can suppose a similar procedure among those of South America, their traditions when relating future wars, might scornfully term them wars with women. Any hint on this subject to Europeans, who had heard from infancy of the feats of the ancient Amazons, might be unconsciously exaggerated into a system or political society, which the Indians might unintentionally confirm by answers to questions imperfectly understood.

Who the white men, and men with beards, may have been, is also a subject involved in the greatest obscurity, or if not true in fact, what has given rise to such a tradition, and that not confined to one nation or people but extended to several both of North and South America? We have observed this curious circumstance among the Mexicans in the history of Quetzalcoatl; among the Nicaraguans in their account of Comizagual; and with the Muyscas of Colombia in their tradition concerning Bochica.

The Peruvians make more frequent mention of white men in their traditionary annals than any other American people. We recall to mind, their relation of Tice-viracocha, and that nameless one like him, that the people of Canas attempted to stone, the white and bearded men of the islands in lake Titicaca, and those mentioned by Herrera as having constructed the buildings at Guamanga. In addition to these already mentioned, we introduce the following tradition related by all the historians of ancient Peru.

In the reign of the Inca Yahuar-huacac, (the seventh from Manco Capac,) prince Viracocha gained a signal victory over the Chancas, which he ascribed to the supernatural assistance "of a number of men with great beards," which he asserted, had been sent to his assistance by an apparition with a long beard. These auxiliaries, it is true, were invisible to every one but the prince himself, and after the battle was gained were converted into sensible stones, &c. (*Garcilazo, Roy. Comment.* 162.)

All the concern we have with this piece of military craft, is, the respect paid to men with beards, which was no doubt

founded on popular traditions, and which was resorted to that the people might be encouraged to fight bravely, when the existence of their empire was at stake.

If we considered these traditions of *white men* to be literally true, there appears an absolute impossibility to explain the fact unless they were aboriginal; for it is incredible, that Europeans had ever been wrecked on the coast of Peru before the invasion of Pizarro. Nor could the whiter Islanders of the Pacific ocean have been ever driven in their canoes to this coast, for the distance is not less than twenty-four hundred miles to Easter island, the nearest one from which they could be derived, and their voyage would also be directly opposed by the trade winds. Neither can we bring to our assistance the white Indians of Ohili, or other parts of South America, (see page 22,) for they are not different from the barbarian tribes in any respect; whereas, the traditions to which we refer, connect them in every instance with power and wisdom superior to the red or brown men.

I am inclined, therefore, to believe, that the words in the different Indian languages which have been interpreted *white*, rather signify a bright complexion or appearance; that is, something brilliant, or divine, as denoting celestial origin, which either the flattery of the Indians, or the vanity of the Spaniards, may have compared directly to the colour of Europeans.

Why beards were attached to the heroes of these traditional legends it is difficult to conjecture a sufficient reason. The Peruvians, like other American nations, have little beard, and the usual fashion was to pluck it off the face, hence, I presume, their *beau ideal* of a man would be one without a beard. But it may also be, that because it was unusual to see a thick beard, they might choose thus to designate gods or heroes, who might naturally be supposed different from ordinary men. At any rate, I can offer no opinion more plausible, and submit the matter to others who may have greater opportunities of investigating the history and mythology of aboriginal America.

CHAPTER IX.

ON CERTAIN TRACES OF UNKNOWN DEMI-CIVILIZATION OBSERVED IN SOUTH AMERICA.

THAT this volume may contain every particular pertaining to the ancient condition of America, as far as we have information, we have thought proper to bring together under one head, some detached notices of various travellers concerning traces of imperfect civilization observed in different parts of South America, which under our present state of information we are unable to refer to more distinct heads. We trust, however, that at some future day, the subjects of the present chapter may be exhibited with much greater interest.

"In the province of Venezuela," (*Humboldt, Pers. Nar.* iv. 314,) "on the plains of Varinas, are some feeble monuments of the industry of a nation that has disappeared. Between Mijagual and the Cano de la Hacha, we find some real *tumuli*, called in the country *Serillos de los Indios*. They are hillocks in the shape of cones, formed of earth by the hands of men, and probably contain bones like the *tumuli* in the steppes of Asia. A fine road is also discovered near Hato de la Calzada, between Varinas and Canagua, five leagues long, made before the conquest in the most remote times by the natives. It is a causeway of earth fifteen feet high, crossing a plain often overflowed. The Indians whom we now find between this river (Rio Apura) and the Meta, are in too rude a state to think of making roads or raising *tumuli*."

The antiquities noticed by Humboldt are not the only ones to be found in this region. Herrera (*Hist. Amer.* iv. 221, 223,) makes mention of a territory in this neighborhood called Zenu, where in a field near a temple "were found abundance of graves, some of them so ancient, that large tall trees were grown over them, and within them an immense quantity of gold, besides what the Indians took out and what is still lost under ground. These graves or tombs were magnificent, adorned with broad stones and vaults into which the dead bodies were laid, &c. The deceased were buried sitting, clothed, and well adorned. Many of these tombs were large plain rooms, and others only like great heaps of earth."

On the coast of Paria, there was certainly a half civilized people established at the time of the arrival of the Spaniards.

Herrera (*Hist. Amer.* i. 229,) relates, that Guerra perceived the natives held "fairs or markets," and that they used earthen ware of various shapes; and gold castings of different figures were worn as ornaments, &c.

In A. D. 1510, in this district P. Martyr, (*Hackluyt, West Indies*, page 298) says, Colmenaris found a king with his suite clothed in cotton garments, which was particularly remarked as a fact previously unobserved among the Indian tribes as far as they were then known.

Bouguer in his voyage to Peru, (*Pinkerton, Amer. Voy.* iv. 309,) takes notice, in several places, of rocks and stones engraved with various figures or characters. Those the most remarkable, were about three leagues from Bacche, (N. lat. $3^{\circ} 16'$) which he thus describes. "Two of the largest have a surface of nearly twenty feet in length by eleven in breadth, and very smooth. Upon them are engraved many characters and figures. Similar stones equally well engraved are found in many places more remote and higher in the Cordilleras, but I have seen none of them. I have made a drawing of those mentioned. Probably, some inscription is designed by all these characters and figures, which point out by hieroglyphics certain extraordinary natural events. It appears to me, to have been a work of much deliberation and patience. The figures are cut two inches and a half deep at least."

Similar figures like those described by Bouguer, appear to be common in many parts of South America, and which remind us of the sculptured rocks of North America which we have briefly mentioned page 109.

Baron Humboldt states, "some granitic rocks which rise on the savannahs of Guiana, between the Cassiquiare and the Conorichite, are covered with figures of tigers, crocodiles, the sun, moon, stars, and other characters, which may be regarded as symbolical. Similar figures are found four hundred leagues to the north and the west, on the banks of the Orinoco near Encaramada and Caicara, on the borders of the river Cauca, near Timba, between Cali and Jelima, and even on the elevated plain of the Cordilleras in the Paramo of Guancas. The natives of these regions are unacquainted with the use of metallic tools, and all concur in asserting that those characters existed when their ancestors arrived in those countries."

In another work, (*Pers. Nar.* iv. 473,) Baron Humboldt remarks, that many of these hieroglyphical figures, are placed on the perpendicular faces of rock accessible only by constructing lofty scaffolds. When the natives are asked to

explain this circumstance, they relate, that at the period of the *great waters* their fathers went to that height in boats.

Sir Walter Raleigh, I believe, was the first person who made the Europeans acquainted with the circumstance, that on the lower part of the river Amazon, the Indians were in possession of certain green stones, exceedingly hard, which were cut into various shapes and figures. These stones were said to have been fabricated by the Amazons, and were once highly esteemed under the ridiculous idea that they could cure diseases of the liver.

Condamine, one hundred and fifty years after Raleigh, found numbers of these stones among the Indians near the mouth of the Topayos river.

Humboldt observed similar stones among the Indians on the banks of the Rio Negro, and from him we derive the following description of them. (*Pers. Nar.* v. 382.)

The most usual form given them is that of the Persepolitan cylinders, longitudinally perforated and loaded with inscriptions and figures. The stone itself, belongs to the *Saussurite*, to the real jade, and forms one of the constituent parts of the *verde de corsica*, Euphotide of Haüy.

Whoever may have cut these singular stones, it is certain that the nations did not in whose possession they are now found. Humboldt says, they are in the "last degree of barbarism," and so little idea have they of the manner by which they have been cut, that they imagine the green stone is taken soft out of the earth, and hardens after being moulded by the hand.

It is scarcely necessary to add to the above accounts that we know not from whence these stones have been derived, nor by what means the Indians have come into their possession. I will barely suggest the possibility, that they are taken from the tombs of some ancient and forgotten demi-civilized people in the interior of the country, whose locality has not been examined by civilized man.

Indications of a partial civilization in the interior parts of South America, were observed at an early period of the Spanish conquest, but it is not easy to determine how far the accounts have been exaggerated by the first travellers, who were soldiers inflamed with expectations of discovering the kingdom of El Dorado. Without venturing to mention all the matters related by them, it may be proper to take notice of a few not improbable statements, concerning a certain demi-civilization observed among the Indians of this unknown part of South America.

Huten, one of these military adventurers in search of El

Dorado, (*Humboldt, Pers. Nar.* v. 821,) in A. D. 1541, came to a town called Macatoa belonging to the Guapes. "The people there were clothed, the fields appeared well cultivated, and every thing denoted a degree of civilization unknown in the hot regions of America. Hutten was told, that further to the south-east he would enter the territory of the great nation of the Omaguas, the priest-king of which was called Quareca, and who possessed numerous herds of lamas. Orellana saw lamas at the dwelling of an Indian chief on the banks of the Amazons, and Ordaz had heard mention made of them in the plains of Meta."

Speier, who preceded Hutten, and who made his incursion in a more northerly direction, crossed the plains of St. Juan and made a long stay at the village of Fragua. Here he found a temple of the sun, and a convent of virgins similar to those of Peru and New Grenada. (*Humboldt, Pers. Nar.* v. 811.)

As illustrating the general subject of this chapter, we must further state, that not long before Baron Humboldt arrived in Peru, an enterprising Franciscan missionary found among the Panoes, a tribe of Indians living on the Ucayle river a little to the north of the Sarayacu, bundles of paintings which resembled our volumes in quarto. These paintings we have already mentioned at page 306. Humboldt (*Res.* i. 174.) says, that "when the missionary reached the dwellings of the Panoes, he found an old man seated at the foot of a palm tree, and surrounded by several young persons to whom he was explaining the contents of these books. The savages would not at first permit a white man to approach the teacher, and informed the missionary, that these paintings contained hidden things which no stranger ought to know. With great difficulty the Franciscan procured one of these books, which he sent to Lima," &c.

The Panoes at present differ but very little from other savages in this neighbourhood according to the meagre accounts we possess of them; but it seems evident from the fact of their hieroglyphic paintings, that they are either an anciently civilized people fallen into the savage state, or they have become possessed of these books, by the conquest of, or adoption into some nation, of whose history we are as yet entirely ignorant.

It is not improbable, that the traces of civilization observed in South America, north of the river Amazon, were more or less connected with the ancient Muyscas and Peruvians. Indeed, the tradition of the Muyscas expressly states, that Bochica the great founder of their religion and social state, came from the plains of St. Juan, known to them as the ancient

Cundinamarca. The *lamas* observed east of the Andes along the rivers Amazon and Meta, might have been brought from Peru by some people emigrating from thence, or perhaps, were procured accidentally in war and were driven far to the westward.* But we must also bear in mind, that there were very extensive communications among the Indians of South America, which indeed are so remarkable, that Southey in his history of Brazil remarks it is exceedingly difficult to explain how they took place.

As throwing some light upon our general subject, we shall introduce some particulars concerning the Chancas, a people mentioned in the ancient history of Peru, which may tend to explain how traces of civilization in the course of a few centuries might be extended over an immense extent of country.

The Chancas are represented by Garcilazo (*Roy. Com.* 115, 177,) as a warlike and powerful people who were partially conquered by the Incas of Peru. They reported that they had proceeded from a fountain through a progenitor named Leon, if called aright. These people possessed twenty-four paintings, which Garcilazo says, were "painted after the manner of Hercules, with a lion's skin and a man's head." They are said to have come to Peru from a great distance, and to have compelled the ancient inhabitants to yield them an establishment in the country. A part of the Chancas, mal-treated or discontented with the Incas after their subjugation, abandoned Peru under the command of a valiant chief called Hanco-hualla. These crossed the Andes with their women and children and were never heard of afterwards, except by some vague report preserved in tradition, that they had moved to a great distance, where they ultimately settled on the banks of a great lake, and increased in wealth and performed mighty acts.†

South of the river Amazon, in the interior of the great empire of Brazil, we have also remarked certain traces of demi-civilization, which however rude they may appear, still by the consent of all travellers, are deemed much greater works than the present race of Indians in that country are supposed to have ever attempted to construct.

* Yrala found sheep (*lamas*) domesticated among the Mapais and Barconos, when on his expedition to the interior of South America. Other marks of demi-civilization were observed among them and their neighbours. However, these people were not far from the frontiers of Peru. (*Southey, Hist. Braz. i. 164, 165, 168.*)

† This brief history of the Chancas, is interesting in several particulars. It might be supposed, they were originally of Toltecan descent, from the circumstance of their being in possession of hieroglyphic paintings. It might be asked, whether they had after leaving Peru any connexion with the Panoes, also possessed of similar paintings?

Southey (*Hist. Brazil*, ii. 652,) relates, that when the Dutch were in possession of Brazil, prince Maurice sent one Herckman into the interior of Pernambuco in search of mines. "He there discovered vestiges of some forgotten people who possessed the country before the present race of savages, and of whom not even the most vague tradition has been preserved. He found two huge perfectly round stones, manifestly rounded by art, and placed one upon the other, the largest being uppermost. They were sixteen feet in diameter, and the thickness such, that a man standing on the ground could scarcely reach to the middle. On the following day he came to some other stones of such magnitude, that it seemed impossible for any human strength to have moved them. They were piled up like altars, and Herckman compares them to some monuments at Drent in Belgium. In the same part of the country Mr. Koster describes a rocking stone."*

Koster (*Travels in Brazil*, ii. 84,) mentions a priest, who had made a drawing of a stone in the province of Paraiba upon which was carved a great number of unknown characters and several figures, one of which had the appearance of being intended to represent a woman. The rock from which these figures were copied was large and stood in the middle of the bed of a river which is quite dry in summer. When the inhabitants of the neighbourhood saw him at work in taking this drawing, they informed him there were several others of a similar kind in different parts of that vicinity.

Though we apprehend some error in the ensuing statement, it is thought proper to make the extract, lest we might seem to have overlooked a singular relation. In Molina (*Hist. Chili*, i. 269, notes,) it is stated, that "between the hills of Mendoza and La Punta, (in the province of Coyo or Mendoza,) upon a low range of hills is a pillar of stone one hundred and fifty feet high, and twelve in diameter. It has marks or inscriptions upon it resembling Chinese."

"Near Diamond river in the same province, is also another stone, containing some marks which appear to be ciphers

* Koster's relation is as follows: (*Trav. in Brazil*, i. 124.) "This afternoon I had seen many rocks of remarkable forms. One particularly struck me as extraordinary; it was placed upon another of much smaller dimensions, and the resting point was so small as to render its removal apparently easy, but on trial it had not the smallest motion."

I know not whether the hill also mentioned by Koster, is to be considered artificial or not; he simply observes, "within a day's ride of Acu, (in the interior of Pernambuco,) I saw at some distance a high hill of a circular form standing quite alone and unconnected with any other high ground. Its sides appeared too steep for horses to ascend."

or characters, and with the impression of a man's feet, with the figures of several animals. The Spaniards call it the stone of St. Thomas."

Having now accomplished our view of the social and moral institutions of the nations of aboriginal America, together with an analysis of them in all those particulars that seemed curious and interesting, let us now attempt to ascertain how far light has been thrown upon the subject of their origin.

In the history of the barbarian tribes of America, we have perceived nothing that can enable us to assert with any positiveness, that they are descended from any particular people of the eastern continent. For the most part, their physical appearance would induce us to look to Asia as their original country, from whence we might also derive that smaller part of our aboriginal population who are either white or black. But between the languages of Asia and America, there is little if any resemblance; at any rate, entirely insufficient to identify them with any particular nation or people. Between the social and moral institutions of the barbarous Americans, and any people of the eastern continent, we are not justified in considering any particular affinity to have been established; for the resemblance appears to be founded alone in the necessities of human life.

In our examination of the institutions of the demi-civilized nations of America, we have been equally unsuccessful in tracing any uniform national resemblance to any people of the eastern continent, whether in language, habits, or institutions. But in analysing many parts of their institutions, especially those belonging to their cosmogonical history, their religious superstitions, and astronomical computations, we have in these abstract matters found abundant proof to assert, that there has been formerly a connexion between the people of the two continents. Their communications, however, have taken place at a very remote period of time, for those matters in which they more decidedly coincide, are undoubtedly those that belong to the earliest history of mankind.

A few of the American nations, have a tolerably consistent tradition concerning the building of the tower of Babel. But from that period of time, we have been unable to perceive that they relate any circumstance of history common to the two continents, which would throw any light upon the probable time of their separation from each other.

Though it may not be an improbable supposition, that the

American nations had been dispersed immediately from the plain of Shinar, and many considerations directly justify the hypothesis, yet we do not think we have seen sufficient evidence to establish the fact positively from any part of our previous researches. If the separation of the people of the two continents took place a thousand or more years later than that memorable epoch, I question whether the points of resemblance or difference between the people of the two continents would be materially affected by the hypothesis.

But at the present stage of our investigation, difficulties are immediately suggested; for it is asked, How does it happen that the communications of the people of the two continents took place alone in such remote periods of time? If communications anciently existed, why have they not also taken place in succeeding ages? Why was America so long unknown to the eastern world? And, moreover, in what manner did these ancient communications take place? How did the original inhabitants of America, and the animals, first arrive in the western continent?

It will therefore be perceived, that we have not yet arrived at the proper place in our researches to make an end of our investigation; for it is impossible, without more light on this subject, to attempt answering the questions we have just suggested.

That we may be able to give a satisfactory solution to the present difficulties, we shall immediately enter upon an investigation of that difficult part of our subject, which has ever been the great stumbling block to inquirers concerning the aboriginal history of America, to wit, the manner by which the men and animals of this continent surmounted the apparent difficulties of an emigration from the eastern world.

All that has been gained, therefore, in our previous discourse, beyond a better acquaintance with our subject, has been the establishment of the fact that ancient communications once existed between the inhabitants of the two continents, and that the era of their separation from each other must be of great antiquity.

On this point we shall be found to agree very closely with Baron Humboldt, (*Res.* i. 249.) "It cannot be doubted," he observes, "that the greater part of the nations of America, belong to a race of men, who, isolated ever since the infancy of the world from the rest of mankind, exhibit in the nature and diversity of language, in their features, and the conformation of their skull, incontestible proofs of an early and complete separation."

CHAPTER X.

ON THE MANNER IN WHICH MEN AND ANIMALS REACHED AMERICA.

BEFORE we attempt to explain in what manner the men and animals of America reached this continent, it is necessary to ascertain if possible, the circumstances of their original creation; for upon this essential particular depends the great interest of our present investigation. It must be evident that we can arrive at no satisfactory conclusion, if it be doubtful whether the Creator of the universe made man and the animals but in one locality, from whence they were dispersed over the earth; or whether he created them in each of those various situations where we now find them living.

So far as this inquiry respects mankind there can be no reasonable ground to doubt the one origin of the species. This fact may be proved both physically and morally.

That men, notwithstanding all the diversities of their appearance, are but of one species, is a truth now universally admitted by every physiological naturalist. The last and best inquirer into this subject, who unfortunately is one who has arrayed his great talents against the inspiration of the scriptures, has nevertheless, after elaborate investigation, declared, "that the human species like that of the cow, sheep, horse, pig, and others, is single, and that all the differences which it exhibits are to be regarded merely as varieties." (*Laurence, Phys. Lect. 469.*)

It is true, this physiologist does not admit that the human species had their origin from but one pair; for he observes, the same species might have been created at the same time in very different parts of the earth. But when we have analysed the moral history of mankind, to which Mr. Laurence seems to have paid little attention, we find such strongly marked analogies in abstract matters existing among nations the most widely separated from each other, that we cannot doubt there has been a time, when the whole human family have intimately participated in one common system of things, whether it be of truth or of error, of science or of prejudice. This fact inexplicable but in the supposition of a single or common origin to the whole human family, we flatter ourselves has been clearly shewn in our previous researches upon the demi-civilized nations of America. But as our inquiries were not directed towards proving the identity of the human race, it must be evident how small a number of the

proofs establishing that fact have been brought under our consideration; and yet I deem what has been said is sufficiently conclusive to establish this truth without further discussion, though I have at hand other facts and arguments of the greatest weight and importance. In our next chapter, or the first appendix, the reader will find some additional proof upon this subject, arising out of an investigation concerning certain matters belonging to the earliest intellectual and moral history of mankind.

As respects the origin of animals, the subject is much more refractory. We find them living all over the surface of the earth, and suited by their physical conformity to a great variety of climates and peculiar localities. Every one will admit the impossibility of ascertaining the history of their original creation from the mere natural history of the animals themselves.

It may therefore be reasonably expected, that naturalists should differ very widely among themselves on a subject involved in such great obscurity. Their theoretic opinions, however, may be reduced to three distinct classes.

Some few persons have imagined that all our present classes of animals are but the successive developments or perfections of simpler states of beings, which have been gradually produced during a long series of ages, from monads, zoophytes, and fishes.

Others have supposed, that animals in their present forms were created in all those various situations where we now find them located.

A third class agree in considering them to have been created but in one spot from whence they were dispersed over the world. This opinion we scarcely need add has been derived from the scripture page.

We can with very little difficulty set aside the first of these opinions, it being contradicted by the universal experience not only of the past and present day, but even by ascending to those early periods of time long anterior to history, where the astonishing labours of Cuvier have shewn the commencement of animal life, and the various successions of living creatures, until we at last arrive to the present races of animals. During all this progress of examination, no such supposed changes in the genera or species of animals, has been observed even in the slightest degree.*

* In the words of this illustrious writer, (*Cuvier, Rech. sur les oss. Foss. i. 59.*) "if the species have changed by degrees we ought to find traces of this gradual modification. Thus between the *palæotherium* and the species of our own days, we should be able to discover some intermediate forms, which,

We have then but two opinions to examine; to wit, whether the Creator of the universe thought proper to make animals in one place only, or whether he created them in all those various situations where they are now found. As we cannot procure a solution of this matter from natural history, it becomes of importance to attempt settling the subject from other data. The Pentateuch of Moses gives us very precise ideas upon the fact, but which we shall not insist upon, as their authority as inspired writings is not universally admitted. But I think we may be able to put the subject into a view simply historical, which may afford us a solution to the difficulty, at least, in those particulars with which we are especially interested in this inquiry.

Moses, who is the most ancient writer we possess, regarding him but as a mere historian, relates, that at a remote period of time our earth was overwhelmed by a universal deluge, which destroyed men and all the animals on the surface of the land, with the exception of a certain number who were preserved in an ark that floated on the surface of the waters.

That this narration is true I cannot doubt, from finding that nearly every different people of the globe entertain the same traditionary belief. But particularly, the ancient Greeks or Phœnicians in their history of Deucalion, the Chaldeans in that of Xisthurus, the Hindus in that of Satyavrata, and the Mexicans in that of Tezpi, expressly declare in conjunction with the Bible, that the different races of land animals were preserved in that same ark, vessel or raft, to which the human species were also indebted for life and preservation.*

I therefore contend that the history of the preservation of

however, have never yet been observed. Since the bowels (les entrailles) of the earth have not preserved any testimonials (monumens) of a genealogy so curious, is it not therefore evident that the ancient (fossil) species, were as permanent in their characters as those of the present time; or at least, that the catastrophe which destroyed them, left no time sufficient for the changes that are supposed to have taken place."

* Though the mere inspection of nature cannot furnish proof upon every particular of this statement, yet as far as it can be examined, every fact is consistent with scripture history. In the words of Cuvier, perhaps, the most instructed geologist living, we have the following account. (*Rech. sur les oss. Foss. i. 138.*) "If there is any thing established in geology, it is that the surface of our globe has been overwhelmed (a été victime) by a great and sudden revolution, whose date cannot remount much beyond five or six thousand years; that this revolution has buried, or caused to disappear, those countries which had been formerly possessed by man, and those species of animals best known to us, and that at the same time it had laid dry the bottom of the previously existing sea and formed those countries inhabited at the present day: that it was since this revolution, that the small number of individuals that had escaped, have propagated and spread themselves upon those lands thus recently laid dry, and that consequently, it is only since this epoch that society has been progressively improving."

animals by means of the ark, is established by the direct testimony of various nations both in the eastern and western continents, which, as I cannot conceive how they should, in parts so remote from each other, agree to testify to an event that had never taken place, it is impossible for me not to believe their declaration true in fact. By this history of the ark, therefore, we are furnished with the means of determining the origin of our present races of land animals, not how they were originally created, but that they have proceeded from those individuals who escaped the deluge under the auspices of the patriarch Noah, and who when released from the ark, as from a common centre, dispersed themselves all over the postdiluvian world.

But at the same time that we consider the fact itself proved by the historical testimony of nearly all nations, are we obliged to shew the means by which the preservation of so many different animals was accomplished? The scriptures upon which we rely as an inspired work, declares it to have been done not by human sagacity, but, with the whole stupendous events of the deluge, to have been attained by the influence of the Creator of all things; who must certainly be considered equal to the undertaking.

I know not, therefore, why we should be called on to answer objections as to the impossibility of thus assembling together animals from every climate, and every peculiar soil, into one locality; for we do not profess to explain the fact by mere natural agencies. Yet as a vast deal has been assumed by philosophical objectors on this subject, it cannot be altogether unimportant to shew that the miracle has been clogged by many unreasonable objections of difficulty.

Mr. Laurence (*Physiol. Lect.* 217, 221,) asserts it to have been zoologically impossible to have collected all living land animals together in the ark, and he then proceeds to relate the supposed insuperable objections to which such an opinion is liable. These, as they are sufficiently evident to every one who has considered this subject, we shall not extract, though we shall not lose sight of them in our following considerations.

As to the physical impossibility of collecting all the different species of land animals together in the ark, though I do not attempt to seek an explanation in mere natural causes, yet I must state, that I have seen exhibited in this city living animals from so many different parts of the earth, that I cannot suppose it an impossible matter to assemble every species of land animal in one place, at least, for a short period of time. In the course of the last year, I saw a lion, tiger,

elephant, lama, tapir, two kangaroos, a hyena, zebra, ostrich, and numerous baboons, monkeys, and birds, thus brought together from all parts of the globe. It is but reasonable to suppose a greater variety may have been exhibited in London during the same time. To what an extent the experiment might be carried it is impossible to state, but Mr. Laurence might have learned, that of the two species of animals to whose admission in the ark he has most expressly objected; to wit, the polar bear, and the arctic fox, the former has more than once been brought to England; (*Pennant, Arctic Zool.* i 54, 56. *Hist. Quad.* ii. 289,*) and the latter has been seen a voluntary exile so much to the southward of the polar circle,† that I cannot perceive any adequate reason against supposing man could have brought it to any moderately temperate climate.

But the magnificent collection of living animals at Paris, will exhibit this subject in a much stronger point of view than my limited observations can presume to extend themselves. According to the translation of Deleuze, *History and Descript. of Museum of Nat. Hist. at Paris*, part 2d, p. 567, 568, &c., there has been at various times in that celebrated collection, the following number of *living animals*, which is of so great an extent that I shall only repeat the genera, and number of the species.

Of the Genus *SIMIA*, thirty-five species.

"	"	LEMUR, six do.	[polar bear.
"	"	URSUS, four do; one of which <i>U. maritimus</i> , or the	
"	"	VIVERRA, twelve do.	
"	"	CANIS, six do.	
"	"	FELIS, eleven do.	
"	"	PHOCA, two do.	
"	"	DASYURUS, one do.	
"	"	DIDELPHIS, three do.	
"	"	PHALANGISTA, one do.	
"	"	PHASCOLOMIS, one do.	
"	"	SCIURUS, four do.	
"	"	ARCTOMYS, one do.	
"	"	CAVIA, three do.	
"	"	CASTOR, two do.	
"	"	DASYPUS, two do.	

* Cuvier says, (*Rech. Os. Foss.* i. 37,) l'ours blanc a été vu même en Egypte sous les Ptolomées." The white bear was seen even in Egypt whilst under the dominion of the Ptolomies.

† "The arctic fox, sometimes loses its way and has been taken in places far from its natural haunts. The late Mr. Kalm has left an instance of one being taken in Westrogothia. Professor Retzius favoured me with an account of one shot near Lund, in lat. 55° 42'. (*Suppl. to Arctic Zool.* p. 52.)

Of the genus **ELEPHAS** one do.
 " " **DICOTYLES**, two do.
 " " **EQUUS**, two do.; viz. *E. Quacia*, and *E. Zebra*.
 " " **CAMELUS**, four do.
 " " **CERVUS**, five do.
 " " **MOSCUS**, one do.
 " " **ANTELOPE**, six do.
 " " **BOS**, three do.
 " " **CAPRA**, three do.
 " " **OVIS**, two do.

From this extensive experiment made by the munificence of the French kings, I think we have very reasonable grounds to infer, that it might not be physically impossible to congregate all kinds of animals together in any certain locality of the temperate zone, even from climates the most widely separated.* And though the food the above mentioned animals received in France, undoubtedly, was not as congenial to their natures as that they would have selected for themselves in their natural countries, yet we nevertheless perceive they not only had endured long sea voyages, but they afterwards lived upon the productions of a very different soil.†

I next proceed to observe, that every natural facility in accomplishing the preservation of animals by the ark, and in suiting its history with their different natures, appears to have been arranged with the utmost skill and wisdom.

* According to Turton's Linnæus, (Edition of 1806,) there are forty-four genera of quadrupeds known to naturalists. The French collection stated above contains twenty-six. Of the remaining eighteen, nine genera are European, which thus leaves but nine to be accounted for: of these, I can see no difficulty attending their importation beyond that of other animals already carried to Paris.

† Objectors to the truth of the scripture account of the deluge, have largely expatiated upon the impossibility of providing the different classes of animals with proper food. They seem to have entirely overlooked the wonderful power with which animals can sustain a long abstinence, or else accommodate themselves to situations which appear very incongruous to our assumed views of their particular natures. The following extract very forcibly illustrates this observation as far as concerns the herbivorous animals, yet I can see no reason why a similar mobility of nature should not prevail among all classes of animals.

Hearne (*Journey to Coppermine River*, 244,) asserts, that "the beaver will eat flesh, such as partridges and venison. In fact there are few of the graminivorous animals that may not be brought to be carnivorous. It is well known our domestic poultry will eat animal food. Thousands of geese that come to London market are fattened on tallow craps; and our horses at Hudson's bay would not only eat all kinds of animal food, but also drink freely of the wash or pot liquor intended for the hogs; and we are assured by the most authentic authors, that in Iceland, not only black cattle but also the sheep are almost entirely fed on fish, or fish bones during the winter season. Even in the Orkney islands the sheep go down to the shore to feed on the sea weed."

The place of their meeting was in a temperate locality, suited in general perfectly well for all kinds of animals. To those of the warmer regions, for the most part, it was about the temperature of their winter or cooler season; to those of the frigid zone, it scarcely exceeded the summer heat which they annually experienced. And the place of general assemblage, is sufficiently remarkable above all others on the face of the globe, in having the greatest extremes of temperature brought into more immediate approximation than has been elsewhere discovered.

We have no reason to think the ark had floated far from the spot where it was constructed,* but by nearly unanimous consent of ancient tradition, it rested after the deluge on the mountains between the Black and Caspian seas, a most remarkable locality either for receiving or discharging animals according to the particular temperatures most agreeable to their natures. Immediately to the north, is the high and cold region of Tartary and Russia, which would enable every animal whose instinct might prefer a northern temperature, to pass with rapidity even to the shores of the polar ocean. Immediately south, the transition from a temperate region to the heated plains of Armenia and Arabia is equally rapid, while in any direction either east or west, the animals of the temperate zones could locate themselves without difficulty, as far as climate alone is concerned.

Now, in the resettlement of the earth after the flood, we must also bear in mind that there are but three contiguous zones of the earth to supply with animals; to wit, the northern polar region, the northern temperate region, and the torrid zone. Therefore, no animal after leaving the ark had to cross or pass through a zone or temperature uncongenial to its nature. There is no southern temperate, or southern polar region, to supply with terrestrial animals; for there are no animals to my knowledge, either in the southern extremities of Africa or America, that are not found to live equally well within the tropics. At any rate, the genial influence of a tropical climate, in the eastern continent is continued to the Cape of Good Hope; and in America, though the southern extremity of Patagonia and Tierra Del Fuego are cold regions, they are either without terrestrial animals, or possess such as live in the vicinity or on the mountains of Chili. Now, this chain of mountains extends from the arctic regions of America to the southern extremity of the continent; and by reason of their great elevation, carry a

* "Neque enim verisimile est machinam tantæ molis, formæ quadrangulæ; neque ad motum comparatæ, tam multis animalibus et cibariis gravem, facile potuisse longum iter emetiri." *Bochart, Phaleg, lib. i. chap. 4.*)

cool or even freezing temperature through the tropics to Cape Horn. Upon any part of this chain, animals simply terrestrial might live as well as at the polar regions. I know not whether this fact be at all necessary to explain the zoology of Tierra del Fuego; for according to our information, there are no land animals found there hitherto that have not been observed in Chili.

But there is a remarkable circumstance in the history of animals to be taken notice of, which I think inexplicable except in the fact of their having been preserved in the ark of Noah; for I have been unable to discern any other event in the history of the world in the least degree explanatory of the circumstance. I allude to the history of our domestic quadrupeds. My attention was directed to this very interesting subject, in observing the entire inability of our naturalists to ascertain either their original native countries, or the wild animals from whom they might be supposed to have been derived.* After some examination of this subject, and from finding the little agreement among naturalists on these particulars, I can scarcely hesitate to assert, that we know neither the savage stock nor the original country of the horse, ass, ox, sheep, goat, hog, camel, dog, and cat.

This very curious fact is susceptible of but one explanation. After the subsidence of the waters of the deluge, by which every animal savage or domestic had been destroyed, the ark was opened for the replenishment of the earth, and the animals it contained were suffered to escape to whatever localities their instincts might direct them. But we may very naturally conclude, that the patriarch Noah and his family were not so simple, as to permit the useful domestic animals to also wander off whither they pleased. We may reasonably suppose they were restrained for economical purposes, just as any one possessing common sense would do at the present time if placed under similar circumstances. The consequence therefore is evident, that our domestic animals from the time of the deluge have been in servitude to man, and it is no way surprising that we are ignorant of their savage stock or of their originally native countries.†

Now, when we consider the facility with which strayed horses and oxen have multiplied themselves in South Ame-

* "To determine the original stock of our domestic animals is one of the most difficult undertakings in zoology." (*Laurence, Lect. on Physiol.* 224, note.)

† Every historical testimony concurs in deriving our domestic animals from Persia, Armenia, or the adjacent country. But there it was that the ark rested after the flood, and there it was that the fathers of mankind originally established themselves.

rica into immense herds, I cannot see the reason, why, if the original stock had ever been in a wild state since the flood, they should not be yet found somewhere or other in their savage condition; yet of all the animals we have enumerated nothing but confusion and uncertainty prevails on the subject of their origin.

For a long time I had assented to the universal opinion, that our domestic animals might be traced to certain wild species to which the more general conjectures of the naturalists had directed our attention. And though there were some very sensible differences between the supposed wild and domestic animals, yet it seemed plausibly explained, by supposing these differences were the result of their domestic servitude and frequent cross breedings. The wonderful researches of Cuvier have, however, in certain instances shewn that our suppositions on this matter have been very erroneous. In his discourse on the domestic ox, (*Rech. Os. Fossiles*, iv. 109, &c.) he has shewn from its unvarying character through all its varieties, that there is no living savage animal from whom it can be derived. Yet fossil bones, found in various parts of Europe, have shewn that the species of the domestic ox, (*Cuvier, Rech.* iv. 108, 165, 303, 305 v. 512,) remounts at least to the era of the last of those great catastrophes that have overwhelmed the animals on the face of the earth: or in other words to the time of the deluge.*

If then, we repeat it, there are no wild oxen, horses, sheep, camels, &c. known in any part of the earth, unless in those instances where we can trace their origin to such as had been liberated by man, or had strayed from his custody, it is scarcely possible to avoid the conclusion we have drawn from the fact, that the stock of our domestic animals have never been in a wild state since the deluge. And as there is no possibility of having congregated together the entire different stocks of *all* of our domestic animals, in any other manner than by the events recorded of the deluge and the ark of Noah, I cannot but consider we have attained a most important and conclusive argument, in favour of our hypothesis concerning the origin of *all* postdiluvian animals. If any catastrophe has universally destroyed the wild stocks of all our domestic animals, it must certainly have also destroyed every other species of quadruped.

Having now produced what was deemed necessary to ascertain the history of the origin of man and animals, we feel ourselves justified in following the scripture relation that they

* The bones of horses have also been found in a fossil state mingled with those of unknown animals. (*Cuvier, Rech. Oss. Foss.* ii. 110, 112, 113. v. 512.)

have been produced from those individuals alone, who with Noah escaped from the waters of the universal deluge. We have now sufficient data afforded us, to proceed in our investigation concerning the manner in which the men and animals of America reached this continent, and to the solution of that difficult question we shall now direct our investigation.

A simple inspection of the map of the world, at once shews the physical difficulties which embarrass the question, In what manner was this continent stocked with its aboriginal men and animals?

The two continents separated by immense oceans on either side, approximate only by inhospitable regions within the arctic circle, from whence the distance between them increases, until their southern extremities terminate with about ninety degrees of longitude apart.

It is possible that the straits between Asia and America, may be closed in the winter season by fixed or floating ice, as the distance across is not above forty miles. The sea between Europe and America being fourteen hundred miles in width, declares an impossibility that the shores of the two latter portions of the globe have been ever connected together in like manner. Therefore, unless the frozen straits of Behring gave access to the men and animals found originally in America, they could only have been transported in vessels; or, that ancient means of communications by land once existed between the eastern and western continents, which have been destroyed in some mighty physical revolution of the earth. The truth must be found somewhere or other in these theoretic conjectures, though it must be acknowledged that much inquiry and discussion will be necessary to ascertain how far one or all of these suppositions may be sufficient to explain the mystery of American population.

As far as men alone are concerned, they might have passed at Behring's straits, either in the winter over ice, or in summer in their boats. Or they might have arrived either from Europe or Asia in more southern latitudes, in ships impelled by stress of weather, or from the adventurous spirit of sailing through an unexplored ocean.

But if ever these latter contingencies have taken place, the instances have been very few, and of no importance, or they have occurred in times so remote that all remembrance of them has been lost, and the almost total dissimilarity of the aboriginal Americans from Europeans or Asiatics, in language, institutions, and arts essential to life, known in the

eastern continent from the remotest times, leaves the history of their origin involved in the greatest obscurity.

Therefore, admitting the possibility of human emigration in the different ways as above stated, though we think neither the one nor the other has been yet proved,* the most interesting and difficult part of the problem remains to be solved, by shewing in what manner the various animals of America reached the continent. This is an essential part of the investigation, and cannot be separated from the history of our aborigines by any one agreeing with us in the theory of their original creation; and to examine into this difficulty of transporting animals will be our first subject of discourse. If a way can be shewn explaining consistently the manner by which America derived her animals, it is evident the same would offer another mean of emigration to man, in addition to the possibilities heretofore described at Behring's straits or over the ocean in ships.

If any one have the hardihood to maintain that the American animals passed from Asia by Behring's straits, they must inform us how those animals, now living only in the hottest parts of America, were enabled to endure the rigor of a winter in the arctic circle, at which time alone, the connecting ice would afford them a passage. At this season of five or six months night, the cold is so intense as to congeal spirits of wine; and is attended with a deep and frozen snow, covering the scanty herbage of the summer, above a thousand miles of latitude on either side of Behring's straits. These circumstances effectually destroy the possibility of emigration in this neighborhood, even to animals of the temperate zone, much more to those belonging to the tropics.

If we venture to look elsewhere for a passage available to animals by their instincts alone, we must at once abandon the attempt; for nothing but immense oceans studded with occasional islands meet the eye, declaring the impossibility of their having passed either from the eastern or western shores of the other continent, unless by the aid of man.

* Facts, as far as we have ascertained them, do not even countenance the idea of the emigration of men by Behring's straits, if we are to judge either by languages, or the appearance of the different people on either side. Cook says, "All the Americans we had seen since our arrival on that coast, were rather low of stature, with round chubby faces, and high cheek bones; the people we now were among, (the Tschutchi) far from resembling them, had long visages, and were stout and well made; in short, they appeared to be quite a different nation, (*Cook's Voy. N. H.* 4° ii. 448.)

The Americans about Lat. 56° and 58° N. could not understand the Tschutschian or Koriak interpreters brought by Behring and Tschirikow. (*Muller's Russian Voyages*, 88.)

But men who may have crossed the ocean in ships, could not have transported them; for who would have brought the rattlesnake, the cougar, the jaguar and other venomous or ferocious animals? besides, it is absolutely impossible to have brought away whole races of animals from the other continent, so as not to leave a single pair of the species behind.

Such then being the case, we must have recourse to the supposition that some great revolution of our globe has taken place, by which the ancient means of communication between the two continents have been destroyed; and it therefore now remains that we investigate this theory, apparently so important to the understanding of the early history of man and animals; for it is evident that such mighty changes as are here implied must affect the entire history of the globe.

The first argument that strikes us in this matter, is derived from the important fact, that the animals of this continent, are, with a few exceptions, peculiar to America; and are not to be found elsewhere. It therefore follows conclusively, that they must have located themselves by unerring instinct, which could only be accomplished by means of land that once connected the eastern and western continents together. This argument will be perceived in all its force, if we advert to the peculiarities of zoological geography throughout the whole earth.

From not attending to the laws that have regulated the distribution of animals throughout the globe, the mistaken impression has arisen that there was something very perplexing in the fact that various animals were found in America, which could not be discovered in any part of the eastern continent; and hence it seemed impossible to derive them from the latter. But we will presently show, as far as regards this one difficulty of peculiarity, that Asia, Africa, and Europe, are precisely in the same situation with respect to one another, as they conjointly are to America; for each of these portions of the earth has animals peculiar to itself, and not common to the other. Thus the camelopardalis, the hippopotamus, &c. are found solely in Africa; the tiger, one horned rhinoceros, &c. in Asia; and various smaller animals are peculiar to Europe. To exhibit the subject in numbers, perhaps not very accurate, of the class mamalia there are peculiar to Asia 115, to Africa 80, to Europe 16, and to America 145.*

*The total number of species of the class mamalia, according to Shaw, is about 570. Of this number, 40 are whales, seals, &c. which do not come under our consideration; 66 are not designated by him as pertaining to

Therefore, instead of wondering at the peculiarities of American zoology, let us inquire how it happens that there are animals peculiar to Asia and not found in Europe, for these two portions of the globe are separated from each other by the Uralian mountains, and an ideal line alone, and therefore, no insuperable difficulty is opposed to their emigration. Asia and Africa again are connected by an isthmus; yet why has each its peculiar animals? Or to state the subject still more forcibly, let us consider the fact that there are numerous birds peculiar to Asia, Africa, and Europe, whose capacity of flight renders mountains and seas ineffectual barriers to emigration. How does this happen? In whatever manner we may account for these various localities of animals, it is undeniable that *every species* of beast, bird, reptile, fish or insect, has been fitted by nature to peculiar situations congenial to them, and which they by instinct prefer and inhabit.

As zoological geography has been very little studied, and as it is of essential importance to a correct view of the subject we have undertaken to discuss, it is considered of moment to have the theory of zoological peculiarities established by some few details.

Naturalists, in speaking of the localities and emigrations of animals, refer them almost exclusively to temperatures and latitudes. But climate is not the greatest cause of animal location; for we see very different animals living at different longitudes along the same parallel of latitude; and others restrained to particular sections of country, when there is no discoverable reason why they should not be found also in an adjoining district. Thus the musk bull, which even winters in the arctic circle, (*Hearne*, 136, 171,) is not found in Asia, or elsewhere than in North America.* Nor has the American rein deer been ever seen in Siberia. (*Malte-Brun*, *Geog.* book 75.) Now if animals in locating

any particular country, 15 species are stated to belong to Australasia; and 94 are considered as being more or less common to various parts of the earth. But we have every reason to believe, that animals are located in various parts of the globe, according to genera and species, and that few, probably none, are common to widely extended parts. This subject is yet far from being accurately understood; Dr. Prichard, in sections 2d and 3d of chapter 3d, of his *History of Man*, has made a good beginning, though he is certainly mistaken in several particulars. It is to be hoped some zoologist will take this subject into serious consideration, and oblige the world with a good account of zoological geography.

* Professor Pallas is reported to have found the skull of a musk bull near the river Oby. It is not impossible that it had been carried thither by accident; but most probably it was fossil, the shores of the frozen ocean abounding in similar remains. (*Malte-Brun's Geo.* lib. 37. *Brandes' Journal*, xiii. 437.)

themselves on the earth, had alone regarded temperature, these two certainly ought to be common to both continents.

Pinkerton (*Geog* i. 98,) observes, that "the nightingale is not found in North Wales, nor any where to the north, (of England,) except about Doncaster, where it abounds; nor does it travel so far west as Devonshire and Cornwall. This limitation is remarkable, as these birds are found in the severe climate of Sweden."

"The sparrow of Europe is found in all the inhabited districts of Egypt. They are in like manner diffused over Nubia and even over Abyssinia. Excessive heat, therefore, does not disagree with them. At the same time, they are not to be found along the western coast of Africa, from Cape Blanco, or near about it. Not being able to ascribe the cause of this fact to excessive heat, I think I can account for it from the difference of the alimentary plants used in those parts of Africa." (*Sonnini, Travels in Egypt*, i. 135.)

"The lamas are common to the kingdoms of Peru and Quito; the vicunias, on the contrary, are only found in Peru," although these two kingdoms are on the same continent, and have the same climate, air, and pasture.

"On the other hand, there are quantities of wild rabbits (*lapins*,) in Quito, similar in all respects to those of Europe, while there is not one in Peru: and again, we find the viscachas, (an animal something like a rabbit, but with a tail resembling the squirrel) in Peru, which we look for in vain in Quito." (*Memoires Philosoph. par Don. Ulloa*, i. 162 and 164.)

Symes (*Embassy to Ava*, ii. 390,) observes, "It is a singular circumstance, that there should not be such an animal as the jackall in the Ava dominions, considering that they are so numerous in the adjoining country."

Our preceding statements, in conformity with the universal observations of all well instructed zoologists of the present day, seem to point out very conclusively, that animals have been located by nature to peculiar situations over all the earth, which location does not depend alone upon temperature; but that food,* or other inducements hitherto undetected, have influenced their instincts to fix themselves in certain circumscribed districts; and that they do not prefer one land, or country, or latitude, equally well with

*Peron and Lesueur, in their voyage to New Holland, &c. observe, that they saw no trees producing fruits of any kind; and directly remark on this fact, that perhaps, this was the reason they found none of the monkey tribes there, or any other animal essentially fruit eaters. (*Voyage aux Terres Australes*, i. 78)

another.* If this be true, and we do not think it can be controverted, every thing that has been considered inexplicable in the peculiarity of American animals, is removed by showing that every animal, whether of the eastern or western continent, is equally peculiar in its locality.

Our only remaining difficulty is to establish the fact, that they reached this continent by a voluntary emigration. But to justify this theory, it is absolutely necessary that we prove land once existed across the great Pacific or Atlantic oceans, and in both of which we think we can shew no slight proof of stupendous convulsions.

On casting our eyes over a map of the Pacific ocean, we see an almost innumerable number of islands of greater or less magnitude, extending from the eastern coasts of Malacca and China, to the 45° of south latitude; and in an easterly direction for 170° of longitude. The bare inspection of the map alone gives rise to impressions, that these broken and shattered islands are but the remains of an immense body of land that once existed in these seas; and which has been submerged or destroyed in times anterior to any human record. The majority of readers refer the formation of these islands to the Noachic deluge; not being aware of the numerous facts, that modern enterprise has shewn us pertain to these islands, and which cannot be reconciled but to a catastrophe that has happened long after that memorable event. This we consider to be established by the curious facts that can be ascertained by investigating the origin of the men and animals found in possession of these insular spots of the great Pacific ocean.

Taking the animals first under consideration, we observe that certain species are pretty generally diffused throughout these islands, such as hogs, dogs, poultry, &c. similar, as far as has been ascertained, to those domesticated on the coasts of Asia. In certain islands, however, their zoology is exclusively peculiar, and of which we shall subjoin the most prominent instances of those species, that can neither fly nor swim; for such only are of material use to us in our present discussion.

The orang-otang, is only found in Borneo; and the proboscis monkey, in the Sunda islands. (*Laurence, Phys. Lec.* 195.)

Cuvier mentions a rhinoceros peculiar to Java, and ano-

*The celebrated John Hunter, could not breed the Virginian opossum in England, with all his care and attention; yet this animal is found from Canada to Peru, (*Ulloa Voy.* i 44,) and attains its perfection equally well throughout this vast extent of country.

ther to Sumatra, which are not found in Asia. (*Discours sur les révolutions du globe* 69.)

The galeated cassowary, is peculiar and confined to Java, Banda, and a few other islands in the Indian Archipelago. (*Pennant, Outlines of the Globe*, iv. 8.)

In New Holland, is a species of cassowary, (the emu) which is peculiar to that island, unless it be the same species that is also found in New Zealand.

In New Holland, we find forty species of animals, (*Prichard, Hist. Man*, 37,) peculiar to that great island; such as the kangaroo, dasyurus, phalanger, &c.

The following observation on the animals of Van Dieman's land, and other islands adjacent to New Holland, made by two eminent naturalists on the spot, are too important to be given in any other than their own words.

On Van Dieman's land, Peron and Lesueur (*Laurence, Physiol. Lectures*, page 218,) observe, all the animals which we have collected here which can be regarded peculiar to the soil, such as the mamalia, reptiles, &c. are specifically different from the animals of New Holland: the greater part even of the species that inhabit this island, do not exist upon the great island of New Holland, though in its vicinity.

"The striped kangaroo, peoples with its herds the three islands of Bernier, Dorre, and Dirk Hartighs, (N. W. coast New Holland 25° S. lat.) but of this species, we found none in any part of New Holland or in any of the islands which we surveyed in succession. The same phenomena will hereafter be seen with respect to the various species of kangaroos; that is to say, that each species will be seen to exist on such and such islands, or on such and such lands, without any one of them appearing beyond the limits peculiar to its species." (*Voyage aux Terres Australes*, i. 115.)

Thus far, according to our present knowledge of the zoology of these islands, are we able to state the number of animals found on them, incapable of swimming or flying, and that are not domesticated by man. Though comparatively few in number to those which are peculiar to the great continents, I doubt not they are about in fair proportion, numerically, to an equal number of square miles, whether estimated in Asia or America. But whether this estimate be correct or not, the deduction is irresistible, that these peculiar animals could not have reached their present localities, unless land once existed between these islands and the Asiatic continent. Men could not have transported them from Asia, because none are to be found there; and it is incredible, that entire genera could have been taken away, so

as not to leave a single pair behind, setting aside the utter unlikelihood that such men as are found in these islands, ever did attempt to sail with living animals in their canoes to islands often a thousand miles distant from the nearest land. Yet such is the only theory on this part of our subject, against which we shall have to contend.

On the American side of the Pacific ocean, there are but few islands, and those widely separated from each other; they lie at about the general distance of six hundred miles from the shores of that continent. These spots known under the names of Massafuero, Juan Fernandes, St. Julian and Ambrose, the Gallapagos, and Isles of Revillagigedo, have been so little explored, that, with the exception of the Gallapagos islands, we are unable to state whether there be any animals peculiar to them, whose conformation would add any interest to our present inquiry.

But at the Gallapagos islands are found great numbers of a species of land tortoise* whose history is very singular. If they are a variety of the *Testudo Indica*, they are not less distant from the parent stock than the equatorial breadth of the whole Pacific ocean. If they are a distinct species, which is probably the case, they are peculiar to this group of islands alone. I have been informed by intelligent seamen who have landed there, that these tortoises sometimes weigh three hundred pounds, though their general weight is 70, 80, and 100 pounds. This is mentioned to prove they are not to be found in South America, for their great size would not have permitted them to have been hitherto overlooked by travelers, especially as the Spaniards at Lima purchase them for food when brought thither from the Gallapagos islands.

That these animals cannot swim, though they may float in the water, we learn expressly from the Journal of Capt. Porter, late of the U. S. Navy, who informs us that a vessel chased by him threw overboard about fifty tortoises, which several days after he picked up in the same place where they had been thrown, they being unable to make any other exertion in the water than stretching out their long necks. (*Porter's Journal*, 1st part, 162.)

As I think it undeniable, that these animals are not found in America, nor elsewhere than India, supposing them to be varieties of the *Testudo Indica*, and as we shall soon furnish abundant proof that men could not have transported them, it will follow conclusively that land must have existed from

* Guanoes, snakes, and lizards, are also found at the Gallapagos; but as we know nothing of their species we forbear to notice them. As to the fact see *Porter's Journal*, i. 229, 231.

the eastern shores of Asia, at least to the islands where these tortoises are now found. This fact will supply any evidence that might seem wanting to testify for continuous land in that part of the ocean, where at the present time exists nothing but a clear expanse of water for two thousand seven hundred miles.

Hitherto, only animals *peculiar* to the Asiatic and Pacific oceans, have been brought forward to substantiate our theory. Those domesticated by man, might have been transported by him under certain restrictions to moderate distances from other lands or islands. But we shall presently find, that even the origin of this last class of animals, will not, in numerous instances, bear any other explanation than the one given in the case of peculiar animals, unless recourse be had to the most improbable suppositions. This circumstance, however, will be considered in connexion with the history of the islanders of the Pacific ocean, which we consider will produce an important verification of the correctness of our hypothesis.

Though a most conclusive proof of the existence of continuous land across the Pacific ocean, is to be found in the history of animals peculiar to certain islands in that sea, as but just shewn, yet a direct proof can also be given by investigating the history and circumstances under which we find its numerous islanders are at present located.

It would greatly aid this undertaking, could we furnish the reader with correct ideas of the distances that these islanders lie apart. But they amount to so many instances that we despair of such an attempt, and must therefore refer to the maps of the Pacific ocean for this purpose, if the reader be not already aware of the important fact, that many of these islands are often a thousand and more miles distant from each other, or the main land.

Those who consider the islands of the Pacific ocean to have been formed either before or during the Noachic deluge, also consider them to have been at one time since that cataclysm destitute of men and animals, until either a direct navigation or lucky accident supplied them from the eastern continent with their present inhabitants. Both of these possibilities have been put under large requisition. Where any inducement to trade exists, maritime and commercial nations are supposed to have resorted, who gradually established colonies in various convenient situations. But as the barbarity and ignorance of the greater part of these islanders, is completely at variance with the idea of connexion with commercial nations, which always implies more or less civilization, a fur-

ther source of origin is insisted upon, by the supposition that persons whilst engaged in fishing, or other aquatic employment, have been blown off from their native shores, and driven before the winds to other lands, so remote that they were never able to return to their native islands. By these accidents recurring time after time during the revolution of centuries, it has been concluded that man has been gradually spread throughout this immense ocean.

That such accidents have occasionally happened there can be no doubt; but that they have taken place as often as the theory will require, we are well prepared to dispute.

It is a remarkable circumstance that these islanders for the most part, bear such a resemblance to each other in person, habits, and language, that their identity of descent is so very evident, that all navigators in this sea appear to agree in that opinion. The great extent of ocean they occupy may be estimated by the following observation of Capt. Cook. "We find the language of the South sea islanders, from New Zealand in the south, as far as the Sandwich islands to the north, and in another direction, from Easter island to the New Hebrides, to be dialects of the Otaheitan, that is, over an extent of ocean 60° of latitude, or 1200 leagues north and south, and 83° longitude east and west." (*Cook's Voyages*, ii. 251.)

Or in other words, this Otaheitan race who are of a fair, brown, or olive complexion, and with long hair, occupy Sumatra, Java, Celebes, Magindanao, the Moluccas, Phillipines, Ladrone or Marianne islands; also the Mulgrave, Navigator, Society, Easter, the Sandwich islands, and New Zealand.

Bordering on this race of islanders, and even considerably mingled with them, is a race of black men with woolly hair, called by naturalists Papuas. These occupy, for the most part, the remaining islands of this ocean, and are probably of the same stock with the black mountaineers of the Malay peninsula, and natives of the Andaman islands. (*Asiat. Res.* x. 218.) They are also supposed to have been the original inhabitants of Magindanao, and indeed of all the Phillipines; the Isla de Negros is in particular entirely possessed by them. (*Meur's Voyage*, i. 65.) They also inhabit the inland parts of the Moluccas islands. (*Forrest*, 68.) They are found in Borneo, and most of the larger islands of the eastern seas. (*Raffle's Java*, ii. *append.* ccxxxv.) But they more particularly inhabit Papua or New Guinea, the Solomon islands, New Holland, New Caledonia, the New Hebrides, and Van Dieman's land. The diffusion of this race in an easterly direction has been restrained by the Otaheitan stock, but to what degree our present state of knowledge does not justify

us to conjecture. I know of no general theory accounting for the origin of this barbarous race, whose language, apparently broken into a great number of dialects, has hardly been examined.

Those who have hitherto speculated upon the origin of the Otaheitan race, have sought it among the Javans, Sumatrans, Macassars, Malays, and other nations of the Indian islands, whose commercial habits lead them to make frequent and even long voyages in the Indian seas; and certain affinities in language have justified the general hypothesis. The Malays in particular, have been brought forward so frequently as the parent stock of the South sea islanders, that the latter are sometimes called a Malay race, or the Malay diffusion.

Whatever was originally ingenious in this theory, has been set aside more recently by the discovery, that the Malays themselves have been established in the Indian islands, only since the time of Mahomet; which at once precludes the possibility of such extensive diffusion. The analogy pointed out as existing between their language and that of the South sea islanders, has been referred to the adoption of words by the Malays themselves from the inhabitants of the larger Indian islands, who are certainly akin to those of the Pacific ocean. It is not deemed necessary to bring forward any argument disproving the Malay theory. It has been so perfectly overthrown by Dr. Leyden, Marsden, Raffles, &c. that no well informed writer will hereafter attempt its support.*

* As the origin of the Malays may be unknown to some of my readers, I subjoin the statement of the late governor Raffles, who personally resided among this people, and who is besides the latest writer on their history. "The island of Sumatra, Jawa, Tana, Ugi or Bugis land, (Celebes) Sulu, the Moluccas, and Borneo, compose what may be properly termed the Malayan group; and are peopled by nations radically distinct from the Malays; they speak languages entirely different, and use various written characters original and peculiar to each. These nations are governed by their several laws and institutions, and if we except the state of Menangkabaw on the island of Sumatra, it is on the shores of these islands only and in the Malayu peninsula that the Malayus are to be found. Whatever may have been the origin of the Malayu nation, the primary population of these various and extensive islands, could never, according to any natural inference, have proceeded from the Malays, though the reverse may probably have been the case, whatever may have been borrowed from a more foreign source.

"The most obvious and natural theory on the origin of the Malays is, that they did not exist as a separate and distinct nation until the arrival of the Arabians in the eastern seas. At the present day, they seem to differ from the more original nations from which they sprung, in about the same degree as the Chulias of Kiling differ from the Tamul and Telinga nations on the Coromandel coast; or the Mapillas of Malabar differ from the Nairs, both which people appear in like manner with the Malays, to have been gradually formed as nations and separated from their original stock, by the admixture of Arabian blood and the introduction of the Arabic language and Moslem religion." See Raffles on the Malayu Nation. *Asiat. Research.* xij. 102, 127.

By thus rejecting the Malays as the progenitors of the South sea islanders, it will not follow, that other people of the Indian coasts and islands have not furnished their original stock. But if this be the case, the question is hitherto undecided, and we have the claim of no particular nation to contend against. We shall therefore take up our argument against them all, by shewing the inexplicable difficulties that oppose the admission of such general theory, if based upon the supposition, that this was accomplished by means of direct or indirect navigation. It is admitted that a relationship exists between them, but whether it be not rather that of brethren, than of descendants, will depend upon an accurate investigation of this subject.

Let us now proceed to examine into the circumstances under which the Otaheitan and Papuan races have extended themselves in the Pacific ocean.

Beginning with New Zealand in the south; we find on this island, a population varying from a "pretty deep black" to a yellowish or olive tinged complexion. (*Anderson in Cook's Voy. North. Hem.* i. 154.) Capt. Cook in his former voyage, (*Hawksworth*, iii. 42,) says, "their colour in general is brown, but in few deeper than that of a Spaniard who has been exposed to the sun, in many not so deep." Cruise (*Voyage to N. Zealand*, 277,) says, the lower class of people are almost black. From these different accounts, we may infer, that there is an admixture of the Otaheitan and Papuan races in this island, as has been observed to exist in many other islands of this ocean.

As it is a matter of importance to consider the history of the animals found on these islands, in connexion with the islanders themselves, we shall state, that the animals hitherto found in New Zealand, are only rats, a species of fox dog, which is domesticated by the natives, and the species of casowary called the emu, which we have already remarked to be incapable of swimming or flying.

Now, in what manner did the black population arrive at New Zealand? Can it be supposed that prospects of commercial gain, induced the people of New Holland to sail in their canoes 1200 miles to this island, which is the distance between them, and unbroken by any intermediate land? And how did the Otaheitan stock reach this spot? Was it trade, or a laudable desire to populate desert islands, that induced them to sail towards the south pole from the Friendly islands; the nearest place from which we can derive them an origin, but which are 1500 miles distant over a clear expanse of ocean. Such suppositions are too absurd for a moment's

consideration. But might not this population have been driven by stress of weather in their canoes, both from New Holland and the Friendly islands? This I will not say is absolutely impossible, but if they did reach New Zealand, it must have been under the following contingencies.

1st. There must have been two violent storms, one from New Holland, and the other from the Friendly islands, which drove at least two canoes, the one 1200, and the other 1500 miles.

2d. There must have been in each canoe two or more persons of different sexes.

3d. In the canoe from New Holland, they must have brought a male and female emu.

4th. In the canoe of one or the other, they must have brought a male and female fox dog.

5th. In like manner transportation must be found for a pair of rats, which it seems to me will require another canoe; for these and the dogs hardly came together.

6th. The two canoes must have been supplied with provision and water for man and beast, for fifteen or twenty days at the lowest computation; or else if a deficiency of food prevailed, the emus, not to say the dogs, and rats also,* would have fallen beneath the hungry appetites of their masters, who at the best of times are not fastidious in what they eat.

Now, can any thing be more ridiculous than a theory which requires the cooperation of such extraordinary contingencies, and that to people but a single island; can it be possible that learned men have maintained such an hypothesis? Strange and inconsiderate as it may seem, this is a fact; they do not, it is true, detail it as we have done above, but they nevertheless maintain it in principle. But let us proceed with further illustrations of this theory, that is supposed sufficient to account for the human and animal stocks on other islands in this sea.

Let us now consider the history of the Sandwich islands in the north. These are distant from the Mulgrave islands about sixteen hundred miles; and from the islands of Rogge-wein about eighteen hundred miles. From one or the other of which their population must be derived according to the

* Our information concerning the zoology of N. Zealand is very imperfect. In all probability there are other animals there besides those known to us at present. Nicholas (*Voyage to N. Zealand*, ii. 255.) describes the burrow of an animal, which he conjectured might be that of the guana. J. R. Forster says the quail of this island has all the manners of the European bird, which is, I believe, a bird of very small powers of flight. If these accounts are correct, we must add these animals to the cargo of the canoes of our text.

prevailing theory, which also supposes they were driven to this group of islands by stress of weather.

The necessary concurrence of the same extraordinary contingencies that we have enumerated in our observations upon the men and animals of New Zealand, are required to account for the population of these islands. Persons of either sex must have been on board the canoes thus tempest driven, with sufficient provision and water to support them for this voyage of sixteen hundred miles, which could hardly be performed in less than three weeks. But then we have only carried the human species thither, how did the hogs, dogs, rats, and poultry arrive which abound in these islands? One canoe can hardly be supposed to have brought one man, and one woman, one dog and bitch, one boar and sow, one male and one female rat, one cock and one hen, which is the least of each kind necessary, and with sufficient provision and water to support their lives during this voyage through the tempestuous waves of a troubled ocean? How many other tempest driven canoe voyages, under equally perplexing circumstances, are necessary to have stocked this insulated group, after a sixteen or eighteen hundred miles voyage?*

Nor are we done with these extraordinary voyages though unattended with the difficulty of such extreme distances. Under the same concatenation of lucky coincidences, we must first bring men and women, with hogs, dogs, rats, and poultry, from the Solomon to the Fidgi islands, a distance of about six hundred miles, and then having given them time to increase and multiply to a reasonable number, we are to suppose that sudden storms blew off in one or more canoes, a man and a woman, a boar and a sow, a dog and bitch, a male and female rat, and a cock and hen; these we are to suppose got safely through the dangers that menaced them, and arrived at the Friendly islands,† distant about two hun-

* We have in this notice of the Sandwich islanders, assumed the nearest places of origin we could find in the map; but Capt. King, and Dr. Prichard, have brought them much further. (*Cook's 3d Voy.* iii. 139. *Prichard on Man*, 291.) Dr. Prichard observes, "notwithstanding the distance of the Sandwich islands from New Zealand, (above four thousand miles) there are many reasons for believing that they derived their population from that country, rather than from any of the clusters of islands which are situated more in their vicinity; for in manners the natives in many respects, resemble the New Zealanders much more than the Otaheitans, or the Friendly islanders," (which lie exactly between the Sandwich islands and New Zealand.)

† Though the distance between the Fidgi and Friendly islands, is the least of any we have given, yet, we have the following observation from Dr. Prichard, (*Hist. of Man*, 136,) to shew how very great the difficulties are

dred miles. Here they settled and peopled this group, but at a future period, a part of their population, with dogs, hogs, rats, and poultry, are again carried off by a sudden storm to Navigators' islands, a distance of about three hundred miles. Here another colony is established, and again other canoes are driven off with men, women, hogs, dogs, rats, and chickens, to the isles of Roggewein, six hundred miles distant: from hence a similar stock of men and animals, are once more carried off by a westerly storm to the Society islands and the neighbouring groups, three hundred miles further: from hence a party in like manner, are now blown off northerly to the Marquesas, three hundred miles distant; and a second colony, composed according to our present knowledge, of a man and woman, a cock and hen, and the ever accompanying rats, are driven from somewhere or other among these groups, to that insulated spot called Easter island,* distant about fifteen hundred miles; and here the race terminates unless they were blown from hence to the shores of South America, about two thousand four hundred miles distant.

Such are the details of the theory that supposes men and domesticated animals, were driven by storms throughout this great ocean, and under this very remarkable supposition, that all these storms are supposed to have arisen from the west, and to have blown exactly as seamen say in the teeth of the trade winds,† yet so rare is the interruption of these

which attend even this comparatively short navigation. "It is curious, that though the Friendly isles are separated from the Feejee isles by a very short space, no dogs are found in the former. The natives of the Friendly and Feejee islands have but recently discovered each other, and are now beginning to have communication."

Capt. Cook though he saw no dogs at the Friendly islands, says they called those on board his ships by the same name as the Zealanders did, thus shewing a knowledge of the animal.

The Fidgi appeared to Mariner, (page 308,) a race considerably inferior to those of the Friendly islands. The preliminary discourse to the missionary voyage, (lxx.) says, they are a distinct race and speak a different language.

* According to the theory, the people of this island ought to be the most recent colony established, but Dr. Prichard (*Hist. Man*, 295,) says, their idiom evinces a long separation, and other circumstances shew the great antiquity of this distant colony."

Did our work permit, we might shew from the singular monuments existing in Easter island, that this people have been in some ancient time vastly superior in their institutions and arts, to any other islanders of the Pacific. See Cook, and especially La Peyrouse, on their ancient statues and monuments.

† As might be readily supposed, the direction of the currents in this ocean, are from the east to the west; thus Vancouver (ii. 219,) says, "the direction of the currents is certainly from the American continent, for in this manner fir trees have been carried to the Sandwich islands." He also

winds, that certain islanders of the Pacific ocean, have even no name for the west, or northwest winds; as is the case with the inhabitants of the Washington islands. (*Langsdorf's Voyages*, 100.)

I presume it is needless to urge any thing further on this subject. The extraordinary, not to say ridiculous, contingencies, lucky accidents, &c. that are absolutely necessary to support this theory, and the unaccountable prevalence of storms directly opposed to the trade winds, must of necessity consign the hypothesis, at least in its general application to perpetual oblivion.

But in order to do full justice to the hitherto prevailing theory, we will, in the words of Capt. Cook, introduce the relation of a fact which happened to his own experience, upon which the theory has been in great measure founded, and which our readers might judge us uncandid did we omit its relation.

When Capt. Cook discovered the island of Whateeo, he was accompanied by Omai, a native of one of the Society islands, who had been carried to England in a former voyage, and was now returning to his native island. "Scarcely," says Capt. Cook, "had he been landed upon the beach of Whateeo, when he found among the crowd there assembled, three of his own countrymen, natives of the Society islands, who made him the following narrative. About twenty persons in number, of both sexes, had embarked on board a canoe at Otaheite to cross over to the neighbouring island Ulietea. A violent cross wind arising, they could neither reach the latter nor get back to the former. Their intended passage being a very short one, *their stock of provisions was scanty, and soon exhausted*. The hardships they suffered while driven along by the storm they knew not whither are not to be conceived. They passed many days without having any thing to eat or drink. Their numbers gra-

thinks, that Easter island has been supplied in like manner with certain large pieces of wood, from which the natives have made canoes, their own island affording no such material.

It is stated in Marchand's *Voyages*, ii. 429, as the result of very numerous and scientific observations made by that navigator, that there is a general motion of the waters of the Pacific ocean from east to west of about 8.4 miles every twenty-four hours.

Since writing this chapter, I have read Mariner's account of the Tonga or Friendly islands, and the manner in which he supposes a communication to have originated between the Tonga and Fidgi islands, is precisely opposed to the common theory for populating these islands. He says, page 417, "in all probability the Tonga people *being situated to windward*, have been drifted towards the Fegee islands by stress of weather:" and thus, I presume, any one who examines into this subject would reason, and not imagine that stress of weather would prevail directly against the constant equatorial winds.

dually diminished, worn out by famine and fatigue. Four men only survived when the canoe overset, and then the perdition of this small remnant seemed inevitable. However, they kept hanging by the side of their vessel during some of the last days, till Providence brought them in sight of the people of this island, who immediately sent out canoes, took them off the wreck, and brought them ashore.”* (*Cook's Voyages, N. Hem. i. 200.*)

To this account Dr. Prichard adds, “an instance perhaps still more extraordinary is related in the *Lettres Edifiantes et Curieuses*, of the arrival of thirty natives of the Pelew islands in two canoes, at the isle of Samal, one of the Philipines. These people had been driven by storms from their island three hundred leagues distant,† and had been at sea seventy days.” (*Prichard on Man, 149.*)

The narrative alluded to by Dr. Prichard is to be found in the *Lettres Edifiantes et Curieuses*, vol. xv. 198, 206.

Thirty-five persons embarked in two canoes to go to a neighbouring isle, when a wind so violent arose that they could neither gain the island they sought, nor any other, and so were carried out to the high seas. In this manner they were tossed about by the winds and seas for seventy days, until having nearly despaired of touching land they were fortunately cast on the island of Samal. They supported life during these seventy days in the following manner: They cast into the sea a kind of creel or net (*nasse*) made of small branches of trees tied together. This *nasse* had a large opening at one end which terminated in a point at the other, so that fish which got in could not escape. The fish caught in this manner was all the nourishment they had, and they drank no other water than that which the rain furnished them.

We shall take no exception to the facts related in these two narrations, further than the distance, which has been corrected in the note, and simply observe, that in both instances, the sudden storms occurred precisely contrary to that point of the compass required by the theory for stocking the Pacific islands; for Whateeo lies south-west from Otaheite, and Samal lies north-west from Pelew. Both parties are represented in the greatest extremities from hunger and thirst, and in the one instance at least, the majority of persons died from that cause; consequently, inevitable death awaited any animals that might happen to have been accidentally embarked with them: for they would not only have to endure the gen-

* The distance between Otaheite and Whateeo is about six hundred miles.

† Instead of three hundred leagues, the distance is about two hundred, which makes a considerable difference in the length of the voyage.

eral famine of the canoe,* but common sense would suggest the necessity of killing them for food; and it would be ridiculous to suppose the savages of the Pacific ocean have greater repugnance to raw flesh than Europeans in similar calamitous situations, who have not only eaten animals but even their own species.

Therefore, giving full force to the two facts, and admitting that various other instances have occurred under similar circumstances, unless writers are prepared to shew how sudden storms have so frequently originated in the east, and blown westwardly, how hogs, dogs, rats, and chickens, not only endured a hundred long voyages without food or water, and for what reasons men and women who were dying from hunger and thirst forebore to devour them for food; they will shew nothing more than that man himself might in this manner, have been occasionally transported to various islands *more leeward* than their native lands. But this admission explains nothing; for the origin of the men and animals of the more eastern or windward islands is entirely unsolved, which being the essential part of the question must certainly set the whole theory aside.

Neither does the Pacific ocean alone contain this race of men which we have called the Otaheitan. If we may trust to general resemblance in persons and language, a part of the population of Madagascar, on the coast of Africa, distant 3,600 miles from Sumatra, is of this race also. (*Prichard*, 219, *Malte-Brun*, book 73.) What carried them thither? Was it a storm that impelled their canoes? We should think the most zealous theorist would flag here and give up the theory as completely insufficient.†

* Capt. Cook considered the preservation of the people at Whateeo as a very wonderful circumstance; and expressly remarks of their canoes: "such wretched sea boats as their inhabitants are known to make use of, and fit only for a passage where sight of land is scarcely ever lost." This circumstance we have not taken into our estimate of the numerous objections to the storm driving theory from the abundance of other facts.

† In all probability the coasts of western Africa have experienced a similar convulsion with that which has taken place in the Pacific ocean. With this subject we have no concern as elucidating the history of America, but as it is in a geological point of view interesting, we have subjoined a few prominent circumstances in this note.

The isles of France, Bourbon, and Roderigues, when first discovered were without inhabitants, but a few animals of a peculiar kind have been ascertained to have existed on them, whose origin involves difficulties like those of the islands of the Pacific; and which cannot be explained but by the supposition that land once connected them to either Asia or Africa.

That extraordinary bird the Hooded Dodo was formerly found there, which heavy clumsy animal is not only incapable of flying and swimming, but even walks slowly. It is not certain but there may be three species of it found in these islands, but they have never been found in any other part of the globe hitherto explored.

We shall say nothing further respecting the islanders of the South sea, thinking it has been sufficiently proved that they neither derived their population, except in a very limited manner, from the direct voyages of maritime people who may have left colonies, nor from accidental storms which have driven islanders in canoes from island to island. These theories being therefore set aside, we have no other alternative than to believe, that these islanders, as we have proved was the case with the animals peculiar to New Holland, &c. have been saved in the situations where we now find them, when adjoining lands were engulfed into the bosom of the deep. By thus proving the destruction of land, at any rate, as far from the eastern shores of Asia as to Easter island, there cannot be much reason to object against the supposition that other lands have been destroyed beyond that remote island, though indeed what has been said respecting the Gallapagos islands seems direct proof to that point.

If any objection be suggested against our general theory, from the fact that there exists so great a similarity in language, manners, and habits, throughout the Indian and Pacific ocean; we will observe, that considering the very remote period of time at which it is necessary to suppose this great destruction of land took place, such should be the case according to the speculations of those who have most studied the history of the original dispersion of men. Moses informs us, that the children of Ham made their general settlements towards Africa, Japhet peopled Europe, and the descendants of Shem stretched towards India and China. By this we do not understand that they went in a body to those respective parts of the globe, but that emigrations were made from each patriarchal family in those general directions, though probably intermingled among each other in greater or less degree.*

In these islands also is one, perhaps two species of land tortoise, differing so slightly from those of the Gallapagos that we can hardly consider them other than a mere variety, and certainly equally incapable of swimming. We cannot however deny positively their identity with the *Testudo Indica*, or that man has not brought them to these islands from the continent. If this should be done, we will have to rely upon the Dodo alone, for proof of our supposition.

In the island of Madagascar, the following animals are said to be peculiar, never having hitherto been found in Africa or Asia. The Makis, (*Laurence, Phisiot. Lect. 218.*) the Indris, (*Prichard on Man, 91.*) the Genus Setiger or Tenrec, containing three species. (*Prichard, 106.*)

* This is certainly the most natural course that men would follow. It does not appear that any particular allotment of country was assigned to any particular tribes or people; though I consider that the respective descendants of Shem, Ham, and Japhet, migrated in general towards some particular points, more or less remote from each other. I subjoin the following authority to this opinion.

Huc fuit quod rerum Phœnicicarum vetustus Scriptor Histæus Milesius.

Now if the languages of men, as has been generally supposed, bore a dialectical resemblance to those of the same patriarchal stock, it will follow, that under the circumstances of a destruction of land such as we have supposed, all those that were saved in the islands of the Pacific would bear not only a general resemblance to one another, but also to those on the eastern shores of the continent. These analogies in language have been discovered in the island of Madagascar, in the Indian isles, and partially on the continent; and how much more may be shewn hereafter it is impossible to say. We subjoin the following testimonies of learned men to establish our general views.

Sir Wm. Jones observed such traces of the Sanscrit in the languages of the South sea, (*Asiat. Research. iii. 10.*) as to justify the opinion that that language was the parent stock. Halhed maintained the same opinion. (*Maurice's Ind Antiq. iv. 414.*)

Dr. Leyden (*Asiatic Researches, x. 220.*) observes, "many unequivocal marks remain in the Indian islands, and in various parts of the Indian continent, declaring a state of manners to have existed in those countries prior to the introduction of more polished and artificial modes of life, which closely resemble the rude and barbarous customs of the Pacific ocean.

Barrow in his voyage to Cochin China, page 233, makes an observation of similar import.

Capt. King makes the following observation on the natives of Prince's island, (straits of Sunda.) "We were exceedingly struck with the general resemblance of the natives both in colour, figure, manners, and even language, to the nations we had been so much conversant with in the South seas." (*Cook's Voy. N. Hem. iii. 474.*)

Dr. Francis Buchanan (*Asiatic Research. v. 219.*) says, that to judge from shape, size, and feature, the eastern and western Tartars of the Chinese authors, the Calmuc, Chinese, Japanese, and other tribes inhabiting the peninsula of India beyond the Ganges, and the islands to the south and east of this as far as New Guinea, have all the same national origin, which he considers Tartarian.

Lord Valentia (*Trav. ii. 289.*) observes, that it is impossible not to be struck by the resemblance between the Arabs

postquam eos qui e diluvio evaserunt venisse dixit in Sennar Babylonie; addit continuo; de cætero inde dispersi propter linguarum varietatem, habitaverunt ubivis; et unus quisque terram occupavit in quam incidit. Bochart Phaleg, page 72.

This was also the opinion of Bochart. And in further proof, we shall shortly exhibit some instances which can only be explained by this opinion.

of Suakin, (*Red Sea*, lat. 19°.) and the South sea islanders, as drawn in Cook's Voyages.

We might bring forward many matters of local customs and superstitions as additional proof; but this is not deemed necessary, as the general resemblance seems sufficiently established by the above quotations.

Having discussed the history of men and animals of the Pacific islands, as far as relates to establishing the fact, that land once connected Asia and America together in those latitudes where nothing now remains but those insulated groups, let us look at the geological appearance of these islands, and see what additional testimony they offer in support of our theory.

This we can only attempt to do by furnishing the opinions of voyagers in this ocean respecting phenomena observed by them, or changes considered by them as having probably taken place. To such views we shall add a few traditions of the natives themselves.

Volcanic eruptions are supposed (*Howard on the Globe*,) to have destroyed land that existed formerly between the Phillipine, Mariane, and Caroline islands; also between New Guinea, New Holland, the Moluccas, and Maldiva islands.

Gov. Raffles concurs in the opinion that volcanic eruptions have had great agency in the formation of the Indian islands; see his observations on the eruption of Mount Tamboro. (*Hist. Java*, i. 25, note.)

The Ceylonese have a tradition that an irruption of the sea separated their island from the peninsula of India, and the Malays relate, that Sumatra was separated from Malacca by an earthquake. (*Marsden's Sumatra*. 7, note.)

The traditions of the natives of Java respecting the disruption of land, and formation of islands in these seas, are similar to the preceding accounts. (*Raffles, Java*, ii. 65.)

"The Ladrões, and clusters of islands between them and the southern extremity of China, are so near to each other, so broken and irregular, as to appear like fragments disjointed from the continent by the violence of mighty torrents, or some sudden convulsion of nature." (*Staunton's Embas. to China*, i. 387.)

J. R. Forster divides the islands of the Pacific into high and low; the latter of which he considers to have been formed by lithophitical animals. Of the high islands, he says, they bear the most undeniable marks of violent changes from fire and earthquakes, though their present cultivated state partly hides the vestiges of these revolutions. He also observes, after mentioning certain well known instances of

islands having been raised out of the sea by volcanoes.* "I do not imagine that all the high isles were thrown up by fires and earthquakes from the bottom of the sea. Many of them may have existed before, nay they have perhaps constituted greater lands, and were only dismembered by the sinking of the intermediate parts; and the traditions of the islanders seem to indicate, that the inhabitants themselves have some idea of a great revolution which has happened to their isles. The natives of the Society isles, pretend their isles were produced when O-Maoowe (the God who occasions earthquakes)—(*Forster*, 540,) dragged a great land from east to west through the ocean, which land they imagine to be situated to the eastward of their islands: and at that time they say, their isles were broken off as little fragments and left in the midst of the ocean. The God of earthquakes mentioned above, proves that they some how refer the present condition of their isles to a great earthquake as a general cause; and the great land they remember, and of which their isles are fragments, seems to imply, that they have not forgotten that their habitations formerly were parts of a great continent destroyed by earthquakes and a violent flood, which the dragging of the land through the sea, seems to indicate." (*Forster's Obs. on a Voyage round, &c.* 158.)

This tradition is perhaps more directly stated in the *Missionary Voyage*, page 333. "The Otaheitans have a tradition, that once in their anger, the great Gods broke the whole world into pieces, and that all the islands around them

*Some writers have conjectured that many islands of this sea have been protruded from the ocean by volcanoes, or formed as *Forster* conjectures by lithophitical insects. But we should consider such formations to be limited to a very small extent, as is established by the fact, that there are many plants *peculiar* to these islands. For unless it be shewn that there has been a second creation, or spontaneous generation of them on these insulated spots, it will follow conclusively, that they have not been protruded from the deep since the deluge.

Had this been the case, there could be no trees or herbage on them but such whose seeds the birds might be supposed to have brought. We have already proved men could not have brought them; and the currents and general motion of this sea setting *on*, not *off*, the Asiatic continent, could not have floated them away to these islands. *J. R. Forster* says that in consequence of *Capt. Cook's* voyages, 120 species of plants were made known from New Holland, of which but six were described by *Linnaeus*; and among the tropical isles of the Pacific, 220 new species, (*Obs. on Voy. round, &c.* 170,) which, however, he considers far short of what might be collected.

As further proof of the peculiarity of these plants, I subjoin the following observations of *Sir J. E. Smith*. (*Trans. Lin. Society*, ix. 117.) "When the plants of New Holland were first examined, they presented, as I have had several occasions to remark, so much novelty and singularity to the systematic botanist, that the utmost caution was necessary to fix their genera, and even in some instances, their species.

are but little parts of what was once *venoa noe*, the great land, of which their own island is the eminent part."

Capt. Cook (*Voyage North Hem.* ii. 167,) relates the tradition also expressly as to these facts.

Sir Joseph Banks says, "from many circumstances it may not be unreasonably supposed, that Otaheite and the neighbouring islands are either *shattered remains of a continent*, which some have supposed to be necessary in this part of the globe to preserve an equilibrium of its parts, and which were left behind when the rest sunk by the mining of a subterraneous fire; or were torn from rocks which from the creation of the world had been the bottom of the sea, and thrown up in heaps to a height that the waters never reach. The sea does not gradually grow shallow as the shore is approached: the islands are almost every where surrounded by reefs, which appear to be rude and broken as some violent convulsion would naturally leave the solid substance of the earth."

We have confined ourselves to the most particular expressions of opinion in the selections we have here given. Many others of similar tendency might have been added if supposed necessary, derived from the volcanic character of the islands in this ocean. This is so universally the case, that it has been considered sufficiently curious to remark that New Caledonia is the only one that does not exhibit traces of volcanic fires. But considering that enough of indirect argument has been brought forward, we shall conclude this part of our proof, with a single observation from Forster on the plants of these islands, which will shew how consistent the appearances of their peculiar features, are with the belief of continuous land across this ocean.

"As the South sea is bounded on one side by America, on the other by Asia, the plants which grow in its isles, partly resemble those of the two continents, and the nearer they are to the one or the other, the more the vegetation partakes of their general characters. Thus the easternmost isles, contain a greater number of American than of Indian plants; and again, as we advance farther to the west, the resemblance with India becomes more strongly discernible." (*Forster's Obs. Voy. round the World*, 174.)

From the arguments we have produced of land having existed since the deluge between Asia and America, by which the latter might be supposed to have received her original colonies of men and animals, it may seem unnecessary to inquire into the probability of a similar state of things having existed in the Atlantic ocean. But as we have met with certain relations that countenance this latter supposition, and as

it has been already observed in a preceding page, that the original history of America is an essential part of the history of the globe, we think it proper to exhibit all that we have been able to collect upon the probable revolutions of nature in this latter ocean. If it be not of absolute importance in elucidating the mystery of American population, it will be of greater or less value in appreciating geological phenomena, which at present interest such numbers of philosophical and ingenious men.

The islands of the Atlantic ocean do not furnish us with such direct proof of physical revolution, as we have just seen in the history of those of the Pacific. In the first place, they are but few in number; and in the second, they were chiefly discovered by Portuguese or Spanish navigators, which I am sorry to add, almost implies they have never been scientifically examined or described. Though in all probability, no large quadrupeds were originally found there, yet it does not follow, that smaller animals did not or may not yet exist there, whose peculiar character would demonstrate that they had never been imported by the care or forethought of man.

This defect will not, however, materially affect our theory; for islands may have been formed by the wreck of adjoining lands, upon which neither men nor animals might live at such a time. Still, we are not altogether destitute even of this kind of proof.

In the island of Great Britain it is known that the wolf, bear, beaver, urus, and wild boar, were once common though now extinct. These animals it is almost impossible to believe men transported with them from the continent, and the distance across the channel being thirty miles, with a tide running four or five miles per hour, precludes the possibility of their ever having passed it by swimming.

On various parts of the British coasts are many geological facts and traditions of disrupted land, which in the want of more explicit testimony may be adduced as circumstantial evidence.

It is very probable, says Mr. Ray, (*Buffon*, vol. i. 491,) that the islands of Great Britain formerly joined to France: whether the separation was occasioned by an earthquake, or an irruption of the ocean, we know not, but its former junction is evident, from the identity of the rocks and different strata at the same elevation on their opposite coasts, and from the similar extent of the rocks on each side being both about six miles. The narrowness of the strait, which is not more than twenty-four miles, and its shallowness when com-

pared to the depth of the neighbouring sea, render it probable that England has been separated from France by some accident. He adds further to prove their former union, that wolves and bears once existed in England: it is not probable that these animals could swim over, nor can we be so absurd as to suppose men would transport them; we must therefore come to the conclusion, that there has been an union between the island and continent which enabled them to pass without difficulty.*

Kirwan, in his work on geology, says, that England and Ireland have been separated from each other and the continent since the deluge.†

The islands of Scilly, are believed by many of the English geologists and antiquarians, to have been violently separated from Cornwall. (*Hist. of Scilly isles, by Heath, 234.*)

The ancient name of these islands of Scilly, was *Sorlings*, which in the old British language signifies, *separated from the height of the land.* (*Cyclop. art. Cassiterides.*)

According to a curious historical document contained in the British Triads, the island of Anglesea once formed a part of England, even since the memory of man. The tradition is to the following purport: "The three original islands adjoining to Britain were Orkney, Man, and Wight;‡ and af-

* There are numerous geological facts which countenance the belief that there has been a great destruction of land around Great Britain; see, among other instances, the report of the Abbé Correa de Serra, (*Philos. Mag. iv. 287.*) on the subterraneous and submerged forest on the coast of Lincolnshire.

On the coast of Somersetshire are appearances of a submarine forest, which with some considerable interruptions, may be traced about three miles. The Edinburgh Review for Nov. 1817, observes, "there is an evident resemblance between this submarine forest and that on the coast of Lincolnshire. We have also observed similar remains on the shore between the town of Swansea and the Mumbles point, and similar remains we believe, are found in several other places on the coast of Wales and Lancashire. The most obvious cause of these phenomena, is the encroachment of the sea; but Mr. Horner (author of the work under review,) mentions several circumstances which render it not improbable, that in Somersetshire the land itself may have subsided."

† Gen. Valancy (*Collect. Hib. iv. 52.*) says, the old Irish relate, "that a great part of Ireland was swallowed up by the sea; and that the sunken part often rises, and is frequently seen on the horizon from the northern coast. In the north-west of Ireland they call a city of this enchanted island *Tír Hud*, or the city of Hud, believing one stands there which once possessed all the riches of the world. This is a general tradition with them. This island is called *O Breasil*, or *O Brazil*, which signifies royal island."

‡ Bakewell, in his work on Geology, page 234, observes, "the position of the strata in the isle of Wight, demonstrates that some great convulsion has upheaved from their foundations, and overturned the whole mass of Chalk Rocks and the superincumbent strata which covers them not less than three thousand feet in thickness. At the period when this was effected, it is not improbable that England was separated from the continent."

terwards the sea broke the land so that Man (Anglesea) became an island; and in like manner Orkney was broken, so that there were formed a multitude of islands; and other places on the coasts of Scotland and Wales were broken by the sea and became islands." (*Rees' Cyclop, art. Anglesea.*)

Of the Azores, Madeira, Canary, Cape de Verde islands, and St. Helena, we have little or nothing to say. Snakes were found in Gomara, one of the Canary islands, and lizards throughout the group, (*Glas, Canaries, 233, 274.*) I know not the species of either, but presume no one ever brought snakes to an island, while wheat was forgotten or omitted to be imported.

At St. Helena, Capt. Cook found a small snail on the highest parts of the island, whose situation there, induced him to conjecture the necessity of land having once connected this island with Africa. (*Hawksworth's Voy. iii. 432.*)

J. R. Forster remarks, that in examining St. Helena we see every where marks of its having undergone a great and total change from an earthquake or volcano, which perhaps, sunk the greatest part of the island in the ocean. (*Observations on Voy. round, &c. 155.*) This observation is confirmed by Marchand, *Voy. ii. 192.*

On the American side of the Atlantic, we find few islands sufficiently distant from the continent to furnish us with any material argument. On Bermuda, at the discovery were found numbers of "lizards, many and very large." (I suppose guanas) (*Smith's Hist. Virginia, 172.*) The *cancer ruricola* or land crab, was also found here, which as respects its habits, must be considered exclusively a land animal. (*Smith, 40.*) There were no inhabitants originally found at this island.

With the original zoology of the West India islands I am also unacquainted, except from the slight information given by Edwards. (*Hist. West Indies, i. 112.*) He enumerates the agouti, pecary, armadillo, opossum, raccoon, muskrat, alco, and several varieties of monkeys. He however asserts, as a curious fact, which will accord with our theory, "that the Carribean or Windward islands possessed all the animals found in the larger islands, and *some species which the latter were without;*" these however, he does not designate.*

* Edwards also mentions on the authority of Rochefort, that the Caribs held in abhorrence the flesh of the pecary, and therefore they cannot be supposed to have imported this animal from the continent.

De Rochefort (*Hist. Antilles, i. 291.*) says, there are many snakes of different colours and figures found in the West India islands, some of them nine or ten feet in length, &c. In Martinique and St. Alousie, he observes, that

Southward of the West Indies, we meet with no other islands until we come to the Falkland islands, and Tierra del Fuego. Whatever may be peculiar in the animals of the latter, science has not yet laid before us: but on the Falkland islands, is found a species of dog or wolf, that seems to be peculiar to them. This animal has been noticed by several navigators touching at this group, of whom are Dom Pernetty, Bougainville, and Byron. The last furnishes us with the following description: "We here saw many animals called by the crew wolves, but except in size and shape of the tail, more like foxes; they are as big as a middle sized mastiff, and their fangs are remarkably long and sharp. They burrow in the ground like foxes. It is not easy to guess how they first came hither, for these islands are at least three hundred miles from the main land." (*Byron in Hawksworth, Voy.* i. 60.) Bougainville and Dom Pernetty are also embarrassed to explain the origin of this animal. The latter, however, agrees exactly with our hypothesis, in supposing these islands to have been once connected to Tierra del Fuego and Patagonia by land, which has been since destroyed. J. R. Forster, the translator and editor of Bougainville, seems much surprised that so intelligent a navigator as his author should be at any loss to explain this matter, and gravely suggests that these animals were transported on cakes of ice from the continent; for in the same manner we have heard of bears being thus drifted about on the coasts of Greenland. This indeed is explaining the difficulty by a solution that we cannot admit, and whether they are, as is most likely, peculiar to these islands or not,* the difficulties under which they are located, is tantamount to proof that land once connected this group to the continent.

Though our arguments derived from the history of the Atlantic islands, may be considered of no very great importance, yet they are capable of additional support from some traditions that report the destruction of land to a very great extent in the Atlantic ocean. This relation is well known to general readers, and which though maintained by many

there are certain serpents which are poisonous, which was not the case with other islands. If this be correct, it is decidedly in our favour; for no one would be insane enough to import poisonous animals.

When the West India islands were first discovered, the natives certainly held some tradition concerning the disrapture of their islands from each other. Thus Peter Martyr (*Hackluyt, West Indies*, 250,) says of the Lucayos islands: "our men suppose by conjecture, that the Lucayos were sometimes joined to the rest of the great islands. (Cuba, Haiti, &c.) And that their ancestors thought so, the Indians themselves plainly confess."

* Prichard, *Hist. Man*, 140, seems to consider them peculiar to these islands; but Molina (*Hist. Chili*, i. 206,) says they are the same with the *culpen* of Chili.

learned men, has been rejected as an improbable legend by many others. If we received it as an isolated fact, there is not much to be said in its favour; but considering it as we do in connexion with other phenomena of a similar nature, we see nothing in it but what is generally conformable to events that have happened in other parts of the globe, and even to a greater extent in the Pacific ocean. We do not indeed contend for all the particulars related by the Egyptian priests concerning the island Atalantis, of its wealth, or its power, but simply for the fact, that land of great extent has been destroyed in that quarter of the globe, the remembrance of which has been preserved with more or less exaggeration. Men we are convinced never compose traditions or histories without having some foundation for them. But not to insist further on this subject, we will only regard it as collateral testimony throwing whatever weight it may possess in our favour. The tradition is related by Plato in his *Timeus* as having been imparted by an Egyptian priest to Solon, who when a young man visited that country. The story as related by Plato is as follows:

"You Greeks, says the Egyptian, are ever children; an air of youth is visible in all your histories and traditions; your country, from its situation, is for ever exposed to those inundations which sweep away the generations of men, and leave no traces of the past. The lofty mountain of the Thebais of Egypt, affords its inhabitants a more secure asylum, and in its temples are deposited the records of ages, and nations long buried in oblivion. There have been innumerable deluges and conflagrations of the superficial regions of the globe. Your fable of Phæton setting the world on fire, is founded on some mutilated tradition of one of those grand catastrophes, in which terrestrial things have perished by the devastation of the igneous element. Your histories, I know, mention only one deluge; but there have been various and successive deluges prior to that mighty one recorded of Deucalion and Pyrrha. There existed an ancient and celebrated people in Greece, the wisdom of whose laws, and fame of whose valour, are renowned in the sacred writings and ancient annals of Egypt. This heroic race were as highly celebrated for their exploits by sea as by land, as was evident in their arduous contests with the mighty nation who formerly inhabited the vast island Atalantis, now buried in the ocean which bears its name. This island was situated near the straits of Gades, and it exceeded in magnitude all Europe and Asia joined together. It was so called from Atlas, the son of Neptune, whose descendants reigned there

in an hereditary line during a period of nine thousand years; and extended their sway over all the adjoining regions: for there was an easy passage from this island to the neighbouring islands and continents; and their armies passing over into Europe and Africa, subdued all Lybia to the borders of Egypt, and all Europe to Asia Minor. In succeeding ages, owing to prodigious earthquakes and inundations, in the space of one day and night, all that part of Greece which your ancestors inhabited was desolated and submerged, and the Atlantic island itself, being suddenly absorbed into the bosom of the ocean, entirely disappeared,* and for many ages afterwards, that sea could not be navigated, owing to the numerous rocks and shelves with which it abounded."

As a proof of the existence of this island, or country Atlantis, Mr. Taylor, who has translated the works of Plato, gives the following relation of one Marcellus, who wrote a history of Ethiopic affairs, according to Proclus, in *Tim. p. 55.*

"That such and so great an island once existed, is evinced by those who have composed histories of things relative to the external sea; for they relate that in their times there were seven islands in the Atlantic sacred to Proserpine: and besides these, three others of an immense magnitude, one of which was sacred to Pluto, another to Ammon, and another, which is the middle of these, and is of a thousand stadia, to Neptune; and besides this, that the inhabitants of this last island preserved the memory of the prodigious magnitude of the Atlantic island, as related by their ancestors, and of its governing for many periods all the islands in the Atlantic sea." (*Rees' Cyclop. art. Atlantis.*)

The speculations of Ray, Whitehurst, Buffon, Kirwan, and Pennant, upon the subject of the island Atalantis, are all in favour of its former existence, and the arguments they produce from the present appearance of the Azores, Canaries,† &c. are as plausible as can be expected when the great antiquity of the subject is considered. If to their considerations our few proofs be added, it may not be presumptuous to think the tradition almost well established.

We have now brought to a conclusion whatever seemed

* It is a very curious circumstance that the Hindoos describe an ancient region called *Atala*, which they assert was destroyed by earthquakes. (*Asiat. Research*, iii. 300, viii. 375.) Bailly, in his letters to Voltaire, (i. 122, *transl.*) says, the Chinese have a tradition of an island submerged in the ocean.

† The presence of volcanoes, either burning or extinct, in every island in the Atlantic ocean, may be considered as no slight argument in its favour. In the Azores alone, there are upwards of forty extinct or active volcanoes.

to bear directly on our theory which supposes land to have been destroyed, that once in a greater or less degree extended throughout the Pacific and Atlantic oceans. We have yet an incidental subject to introduce having seemingly a reference to such an event, which, however, is not so clear but that it requires some comment and analysis to establish its proper importance. If our conjectures are right in this matter, we shall be enabled to affix with some precision the era of those mighty cataclysms to which we have so frequently alluded in the preceding pages.

We are of opinion, that the time at which this great physical revolution was chiefly effected, is not indirectly alluded to in Genesis, chap. x. v. 25. "He was called Peleg, (*division*) for in his days was the earth divided." There has been among biblical commentators some discussion on the actual meaning of this passage, though most generally it has been assumed to mean a political division of the earth into kingdoms, or even into individual possessions of that soil, which had previously been considered the common property of the human race. But as the etymology of the words employed will equally imply a physical division of the earth's surface, this signification was also noticed by critics though they generally assigned to it the first meaning. As we have shewn from previous discussion, that some great physical revolution of our globe has happened in ages anterior to history, we shall now lay before our readers the evidence that induces us to believe that the brief notice of Peleg on the sacred page, has direct relation to those physical changes which have formed the basis of our theory concerning the peopling of America.

It has also been assumed, that the confusion at Babel was synchronical with the division of the earth mentioned in the history of Peleg; or in other words, that the immediate consequence of the confusion of language, was the separation of human society into distinct nations, which it is supposed is expressed by the relation concerning Peleg: "In his days, was the earth divided," i. e. the earth was divided among nations and distinct political governments.

This mistake has been pretty clearly demonstrated by the very learned Bryant in his *Analysis of Ancient Mythology*, and whose arguments we shall make use of as far as they go to establish that point. But in his explanation of the "division" in Peleg's days we cannot concur.

To shew the difference between the event said to have happened in Peleg's days, and that of the confusion at Babel, he quotes from Genesis, chap. 10. v. 25; "And unto Heber

were born two sons, the name of one was Peleg, (*i. e. division*) for in his days was the earth *divided*." From this verse to the 32d, is an enumeration of patriarchs according to their various descents, when it is finally said: "These are the families of the sons of Noah after their generations, in their nations; and by these were the nations *divided* in the earth after the flood." Upon these verses Bryant remarks that the *division* of the 32d verse is said not to have happened after the building of the tower, or confusion of speech, but after the *flood*: but in the history of the confusion, it is said, the Lord scattered them abroad from *hence*, *i. e.* from the city and tower, did the Lord scatter them abroad.

But the most evident distinction, it occurs to us, is found in the sense of the particular words employed. In "Peleg's days," the *earth* is said to be divided; in the history of the confusion, it is the *people* who were scattered; impliedly two different relations, the one concerning the *earth*, the other relating to *human beings*. As there is certainly an ambiguity in our translation, if not in the original Hebrew, the only possible way of attaining the sense in which the words in question are to be understood, is to refer to that ancient language for information how they are employed in other parts of the scriptures. As my knowledge of the Hebrew language is extremely limited, I can offer no emendations, but shall simply extract the words from the Bible or from Lexicons, which if they contain any speculations upon the etymology, will be found to lean towards the more usual manner of explaining the words in question. Our attempt is to ascertain the sense and import of the different paragraphs in which the word is used.

The word פֶּלֶג, (Peleg) is used in several parts of the Bible besides the verse in question and its parallel passages. It occurs in Job, 38, 25, "who hath *divided* (palag) a water-course for the overflowing of waters." Psalms, 55, 10, "destroy O Lord and *divide* (palag) their tongues;" this Parkhurst translates, *divide, dis sever*. The Targums have interpreted the words ויִבְתֵּר of Gen. 15, 10, in which Abraham *divided* his sacrifices into two parts, by ופֶּלֶג according to Schindler, Lex. Pent. which agrees with Parkhurst as above.

As a noun, it signifies a distribution of water, a stream by which water is distributed, Job, 20, 17, *a brook*; Psalm, 65, 10, *rivers of water*, Ps. 1, 3d, 119, 136. Parkhurst thinks the Greek πηλαγος, the *sea*, which also signifies a *large river*, and the Latin *pelagus*, are thus derived.

Whether this etymology will fully justify our supposition of its reference to a physical division of the earth, or not, we leave to the reader's judgment, who we beg will remember the singular connexion it has with rivers, streams, waters, &c. which in nowise seem to have any connexion with political distributions of mankind. And further we think we can clearly shew that the word פלג *palag*, is never used to signify any locating or apportioning of men to different parts of the earth, either universally or partially.

Thus in Genesis, x. 32, "the nations *divided* in the earth after the flood," is expressed by נפרדו *nepharadu*.* In Joshua, xviii. 10, "he *divided* the land unto the children of Israel, is ו'חלק *va'yechaulek*. In Numbers, xxxiv. 17,

"who shall *divide* to you the land," is expressed by נחלו *yenechalu*. But perhaps, in no place could פלג *palag* have been used with more propriety were it susceptible of the signification usually given, than in Deut. xxxii. 8. When the Most High *divided* (בהנחל *behaunechal*) to the nations their inheritance, when he separated (בהפרידו *behaupheraydo*) the sons of Adam," &c.

The etymological signification of the division of the earth in Peleg's days, is therefore in favour of a physical division,† and certainly cannot be so well applied to a division of men into various nations, or a distribution of countries among them. In all probability it refers to the great cataclysms that we have attempted to demonstrate in our preceding pages, and an additional light seems to be thrown on this chronological assumption by the following traditional histories.

Du Halde relates, that the Chinese annals give an account of a great inundation that happened in the reign of Yao, which he computes was about 2357 years B. C.

In the Hindu records, it is observed, that the fourth Menu, Ta-masa, derived his name from the universal darkness‡ at-

* As this verse, is only seven verses distant from the one commemorating Peleg, and is the sum of the whole chapter; if פלג signified merely a political division, the same word should have been used in the 32d verse, which evidently relates to a political or natural apportionment of mankind.

† Dr. Adam Clarke is of opinion this is the most probable explanation. Mr. P. Howard, author of some ingenious and learned observations on the globe, considers some important physical revolution took place in the early postdiluvian ages, from perceiving the sudden decrement of life in the ages of the patriarchs after Heber, which it is singular is that of Peleg, to whose time therefore he refers such changes. (*Howard on the Globe*. 547.)

‡ This story of an universal darkness does not invalidate the tradition. We have authentic accounts of many similar phenomena, which appear to

tending a flood that happened in his time, which is calculated to have been 2456 years B. C. (*Asiat. Res.* viii. 228.) Now, both of these events will fall within the period of Peleg's life, for he was born 2639 years B. C. and lived 339 years according to the Septuagint, whose chronology we have always adopted.

The Arab traditions seem also to countenance some such event in their legends of Salah and Houd, (Heber) the cotemporaries of Peleg. (*See Herbollet's, Bib. Orient.*)

The name of the patriarch Selah has a signification which certain critics, assuredly unconnected with our theoretical views, have explained in a manner so consistent with our opinions that we are induced to lay it before our readers.

Bochart observes שלח (Salah) Hebrais *emissionem* significat nempe aquarum super terram, ut Job, v. 10, *emittit aquas super faciem agrorum*. Itaque pater pius Arphaxad, qui natus erat biennio post diluvium Gen. xi. 10, primogenito suo videtur hoc nomen indidisse, ut tam horrendi iudicii memoriam refricaret apud posteros. Ita Enoch propheta sumus cum prophetico spiritu prævidisset cladem illam filii mortem statim subsecuram, vocavit illum *Methusela*. Quo nomine significabat statim illo mortuo futuram emissionem sive aquarum inundationem in perniciem mundi totius. (*Bochart's Phalæg, chap. xiii. lib. 2.*)

Bochart is not the only one who has given this explanation to the name of Methuselah; Bishop Watson observes, (*see his Tracts, &c. i. 73.*) "It is the ingenious conjecture of Ainsworth, that Methuselah is a word compounded of two Hebrew words, Muth and Shalac; one signifying *he dieth*, and the other *and an emission*, as much as to say *when he dieth, there shall be an emission or inundation of waters.*"*

If these explanations are correct, we may certainly apply nearly the same reasoning to *Salah*, (who was cotemporary with Peleg) and with this modification; that in *Salah's* case the emission of waters *was not attended with a destruction of all mankind*; as was in the case of Methuselah.

be of an electric nature. See *Philosophic Magazine*, vol. iv. 417. v. 83. The dry fog of 1783, which spread over the known parts of the globe, and which continued during two entire months, was of this kind. (*Ordinaire on Volcanoes, page 131.*)

The deluge of Ogyges was attended with a great darkness; and very likely belongs to this same period. In choosing the chronology of this event, I prefer that given by "Varro the most learned of the Romans," who states it to have been 2000 years before the Consulship of Hirtius; which was about 43 years before Christ. (*See Acad. des Inscriptions, xxxviii. 231.*)

* Calmet, Lightfoot, and Dr. Adam Clarke, concur in this explanation.

We trust we have now shewn that the event related in connexion with Peleg's history, is to be entirely separated from the history of the confusion of Babel; but we are at some loss to fix the period of his lifetime to which we may refer this physical catastrophe, and as Moses only states, that the event happened *in his days*, there is some latitude for conjecture. From the general expression, we should presume, it was at a time when he was more or less advanced in years, and not at his birth. We therefore feel inclined to place the catastrophe in the latter years of his life, which from various considerations will better agree with the history of the postdiluvian ages, than if we place it at an earlier epoch. We shall therefore assume the following chronology, according to the Septuagint. (*See Jackson, Chron. Antiq.*)

B. C.

3170 The Deluge.

[Babel.]

2639 Birth of Peleg; about the time of the dispersion from

2300 Death of Peleg; shortly after the physical division
of the earth, according to our hypothesis.

2098 Birth of Abraham, &c.

It will be seen by comparing these chronological epochs with each other, that from the time of the deluge until the cataclysm of Peleg, above eight hundred years had elapsed; certainly a sufficient time for the wild animals, who had been released from the ark, to have spread themselves over the earth unto every situation congenial to their instincts.*

From the deluge until the dispersion from Babel, or above five hundred years, mankind had lived together, speaking the same language, and using the same arts, sciences, and customs. By this fact we can easily explain the identity of system that prevails among nations since that period the most widely separated; though we cannot perceive in many instances the least traces of international communications.

From the time of the dispersion at Babel until the time of Peleg, whose days we have assumed as the era of a vast alteration of the superficies of the earth, above three hundred years had elapsed, allowing sufficient time for men to have reached the most distant parts of the habitable globe.

*As persons sometimes lay hold of very insignificant matters, to oppose conclusions derived from numerous facts and weighty arguments, I have thought it not amiss to state in a note, that the time allowed in our text for the emigration of animals to all parts of the earth, is also abundantly sufficient to have enabled the *Sloth* to reach America. Pennant (*Hist. Quad. ii. 495.*) informs us this slow moving animal can travel a quarter of a league per day. If we suppose it to have progressed but one third of the distance stated, the time we have allowed is amply sufficient.

We desire the reader should expressly understand that we do not assert that these mighty revolutions took place in a day or year. Centuries may have passed away during the accomplishment of these stupendous changes. All we contend for, as far as any particular chronology is concerned, is that it was particularly remarkable or may have first commenced in Peleg's days.

This view of early postdiluvian history regulated by our physical hypothesis, explains in a perfectly consistent manner every peculiarity of American history, and that not partially, but in perfect accordance with both the physical and moral history of the eastern continent. The magnitude of the cataclysm itself, may deter some from a ready assent to the truth of our theory, yet great and mighty as the convulsion may seem, it appears to me perfectly demonstrable by the various arguments we have used in our researches upon the men and animals of the Pacific ocean. And to all persons who admit the truth of the scripture history concerning the origin of animals from the ark, the same mighty convulsion is evidently demonstrated by the utter impossibility to explain otherwise the history of the numerous land animals of America; whom we have every reason to believe are, with a most inconsiderable exception, exclusively peculiar to this continent.

We have now gone through an investigation of the more prominent and interesting particulars of the history of aboriginal America, whether physical or moral; and as far as our information extended, we have discussed every curious and important circumstance connected with the subject of our researches.

We apprehend, that the result of our whole investigation has tended to establish the fact that there must have been a time since the deluge, when the surface of the earth was so different from its present appearance, as to have permitted both men and animals to locate themselves in all the various parts of the globe where we now find them, and without any material physical impediments.

As this state of things could have existed only in the earlier postdiluvian ages, we cannot be far wrong in assuming the chronology of the cataclysm, which destroyed the ancient communications between the two continents, to have been about three hundred years after the dispersion from Babel; and which is apparently confirmed by the singular though brief observation of the scriptures concerning Peleg.

With the preceding physical statement it will be found that the moral history of the aborigines of America is entirely accordant.

In comparing the barbarian nations of America with those of the eastern continent, we perceive no points of resemblance between them, in their moral institutions or in their habits, that are not apparently founded in the necessities of human life. In their languages nothing but the feeblest analogies to each other are to be observed. In personal appearance, they are, perhaps, identically the same. Thus testifying, that though they are the same race of men, yet they have been separated from each other from the earliest periods of time. I trust it has been fairly shewn that it is impossible they could have crossed the Pacific ocean as it now exists.

We perceive in the history of the demi-civilized nations of America, that they have preserved no remembrance of any emigration from the eastern continent. Their languages, institutions, and habits, are entirely different from those of any other people either Asiatic or European, with whom we have been enabled to compare them. But there is between the demi-civilized nations of America and various ancient nations of the eastern continent, many analogies in matters of an abstract nature which undoubtedly shews original connexion. That the interruption of their mutual communications has taken place in periods of the greatest antiquity seems indisputable, for the points in which they most closely agree, are those that belong to the earliest postdiluvian history, and which indeed, appear to have been originally the common property of all mankind prior to the dispersion from Babel. Of that memorable event, certain American nations have preserved a remembrance in their historical traditions; but from that period of time, we have not been able to perceive any matters of history common to the two continents. Since that epoch, the history of America, unknown, and unknowing of the eastern continent, is overhung with clouds of the thickest darkness, which so entirely obscure the subject that we cannot even conjecture one single particular concerning the transactions of ages. Every thing is overwhelmed in the gloom of unrecorded time.

We have been unable to discern any traces of Asiatic or of European civilization in America prior to the discovery of Columbus. If individuals of those parts of the earth reached this continent, which may not be altogether impossible, they but mingled and were lost in an aboriginal population without leaving a trace behind.

Yet certainly the three great and distinct complexions of

white, brown, and black men, are found among the aboriginal population of America, which we cannot persuade ourselves have originated in this continent from any one original type, however much physical and moral causes may be suggested or multiplied.*

Considering, therefore, that nothing indicating a more recent origin of the American Indians has ever been even plausibly supported, I cannot but hold the most natural explanation of the fact to be, that they reached America at those periods of time when the surface of the earth allowed a free transit for quadrupeds. These last, have certainly located themselves in the various regions of the earth under a system of limited peculiar situations, whose happy proportions, both geographically and numerically considered, distinctly implies the full exercise of unrestrained instinct.

By this early origin we can not only explain why there are so few analogies in languages and institutions between the two continents, except those of the very greatest antiquity, but we also can plausibly conjecture the reason why the Americans should be deficient in horses, sheep, and oxen, as well as certain vegetable substances that have been cultivated in Asia from the earliest times of history. Perhaps it may be necessary for us to explain our views upon this subject more distinctly. The reader will remember, that we have supposed the domestic quadrupeds from the time of the deluge have ever been in servitude to man. As the human family increased in numbers, these animals constituted their wealth, and under those circumstances that have always characterised human societies; namely, that certain individuals will be rich while the majority are comparatively poor. After the dispersion, the more wealthy societies of men, encumbered by their herds, would make little progress in the march of emigration compared with those who had few or none. This class of persons would soon be in advance of all others, in hastening to occupy the more favourable situations in the

* It may not, perhaps, be impossible to trace the route of the blacks found in America, and especially those of our North West Coast. A similar race of men is found in India, Laos, and Cochin China. (*Malte-Brun, Geog. lib. 51.*) They have been observed in the mountains of the Malay peninsula, (*As. Res. x. 217.*) in the Phillipine islands, &c. *Malte-Brun (Geog. lib. 43.)* says, they were found in the island of Formosa when first discovered; and *Kæmpher* relates they had reached to the north of Japan. He informs us, (*Hist. Japan, i. 93.*) when the Japanese discovered the island Genkaisima, situated to the north of Japan, they found it inhabited by blacks with long hair, whom they destroyed in war. As no physiological theory can explain their complexion by natural causes, and as I cannot conceive that they have been spread to the immense distances where we now find them, by any voluntary navigation, I presume they existed in their present complexion at the time of the cataclysm of Peleg. Will it therefore appear an unlikely supposition, that some of the same race had previously reached America, to which continent, indeed, we can trace a sensible approximation of them from the westward.

remoter parts of the earth. Such emigrants would therefore be the first to reach our present country, and the few domestic animals which they originally may have possessed, in having to undergo hasty journeys, exposure and privation of every kind, and perhaps even required for food by their owners, will leave the chances nowise improbable that none would endure to the end of the great journey they would have to perform before they could reach America.

As far as I am competent to judge, every circumstance of the aboriginal history of America, whether physical or moral, is either directly proved, or plausibly established by the theory we have maintained. Even matters the most perplexed in their relations to each other, seem to find a solution in the various necessary contingencies through which our hypothesis has been discussed. Of these subjects, none have been, according to our opinion, more plausibly investigated than the almost paradoxical statement, that though there are numerous analogies existing between the moral and social institutions of the Americans and the earlier nations of Asia and Africa, yet there is nothing that points out any national communication.

The truth of the matter is no doubt as follows: After the dispersion from Babel, mankind were scattered over the face of the earth, carrying with them in greater or less perfection the superstitions, sciences, and practices, which previously had pertained to the whole human family then living as a single nation in the plain of Shinar. The founders of every incipient kingdom, commenced upon those common and universal principles to erect each a moral structure according to their peculiar advantages or disadvantages, which though each may have been perfected by their succeeding posterity in a different manner, yet they all manifestly show by peculiarities of construction, that the original plan was derived from that common country which has supplied the whole earth with inhabitants.

Though we intend to investigate certain particulars connected with the aboriginal history of America in the ensuing chapter, it will only be for the purpose of strengthening positions already taken or of enlarging upon insulated matters deemed interesting and important in the general history of man. At the time these subjects came under our consideration we could not then with propriety extend our views. The time, however, has arrived to close the investigations upon the proper subject of our essay, and we now shall therefore pass on to the discussion of certain subjects, whose importance and bearing we could not previously exhibit to our readers.

APPENDIX I.

ON THE INTELLECTUAL AND MORAL CHARACTER OF THE AGES PRECEDING THE DISPERSION FROM BABEL.

In the course of our preceding investigation, we have taken notice of several curious and important subjects of an abstract nature, which being equally discernible in the ancient institutions of the civilized or demi-civilized nations of either continent, seem thereby to testify, that such systems or such superstitions had been established among the posterity of Noah before their dispersion from the plain of Shinar.

As some of these very ancient analogies between the people of the two continents, imply a state of society to have existed in the first postdiluvian ages very different from that which has been generally presumed to have been the case, it is not only a matter of great interest to have some defined views concerning the early history of our race, but it is in a manner necessary for the better understanding the origin of the ancient institutions and superstitions of some of the demi-civilized people of aboriginal America. These subjects we have passed over with little comment in the preceding pages, as some prefatory statement and discussion was necessary to fairly comprehend their importance, which would then have interrupted the chain of our reasoning and diverted the mind from the natural course of the argument.

We have now a favourable though brief opportunity to consider in greater detail some of those subjects which previously we could but mention in a slight manner. They are, as we apprehend, of the greatest importance in understanding the early history of our species.

Except in the incidental notices of the Bible, from the times of the deluge to that of Herodotus, B. C. 450, a space of about three thousand years, we have not the writings of a single historian to whom we can refer for the transactions of these unknown ages. It is true, that during the intellectual ascendancy of Greece and Rome, some of their historians attempted to recover the preceding history of the more celebrated nations of antiquity, and some of their writings have been preserved to our time, exhibiting a mingled mass of mythology, allegory, and perverted history, entangled with fragments of physical and metaphysical science.

After a long and painful investigation of these imperfect records of the remotest periods of time, successive antiquarians and philosophers have been able to reduce the collections of the Greeks and Romans into something like systematic regularity, the only proof of whose correctness is to be sought in the natural concordance of these diversified materials when compared among themselves.

In this manner, however imperfect it may be, we are enabled partially to raise the veil of time that hangs over the early history of man, and then looking back as far as our sight can reach we perceive amid the gloom of the remotest antiquity, the kingdoms of Chaldea, Persia, Egypt, Phœnicia, and Hindustan, standing remote from each other, and existing in such states of society, that we cannot doubt they had been for a long time in the possession of arts, sciences, and religious establishments, whose gen-

eral features manifest great acuteness and subtlety in their physical or metaphysical composition, shewing undoubtedly, that though their more ancient history has perished, that the restless mind of man during the preceding ages had been ingeniously and laboriously employed upon those objects intellectual or physical, with which we are on every side surrounded.

It is upon these matters of an abstract and intellectual character, that we are about to direct our investigation, the object of which is to ascertain if possible, what was the degree of intellectual light enjoyed by the early postdiluvian nations, and from what source it was derived.

If the sciences of these ancient kingdoms of Asia and Africa, had when we first observe them, shewn marks of rude construction, or had they exhibited a variety of different principles of composition, it might have been supposed from our want of historic testimony, that the different nations of antiquity had by their individual research and ingenuity brought these subjects to the systems into which we find them thrown. But when we find this not to be the case, that they are not only remarkable for the accuracy of their scientific attainments, and for the acuteness of their physical and religious systems, and when we find them bearing undoubted marks of having been derived from some one original and common system, we are excited to the highest degree of interest to explain these singular circumstances; and to ascertain if possible, the still more ancient and original state of things, which is thus perceived to have been the intellectual and moral foundation of all the social institutions of all the earlier civilized people of the earth.

That a surprising conformity in arts, sciences, religious dogmas, and institutions, exists among the more celebrated nations of antiquity there can be no doubt. It has been admitted by all the learned writers of the last several centuries, however much they may differ among themselves in their theories of explanation. The astonishing research made of late years by European literati in Hindustan and China, have greatly extended the field of comparison; for they have demonstrated the identity of systems in those countries with those of Chaldea and Egypt. The researches of Humboldt and others have shewn that America also has participated in the general system; and the fact is undoubted, that some one ancient state of things has influenced the intellectual institutions of the whole human race.

Our present inquiry, however, is not made to investigate the general subject. The undertaking is too vast to be even sketched in a chapter but supplementary to our previous investigation. Those who require to be convinced of the truth of our declaration, must examine the writings of Bochart, Bryant, Gale, Bailly, Faber, and numerous others, who have either directly or indirectly discussed this subject. We must in this place consider the fact to be established, of which indeed we have, as far as the nature of our previous essay permitted, already exhibited some important verification.

Believing then the identity of system that prevails among the more civilized nations of either continent, to be an established fact, it would appear to us to follow almost conclusively, that the only explanation naturally applicable to such an extensive identity, is to be found in the belief, that the ground work of all human intellectual establishment was laid in those ages preceding the dispersion from Babel; and that when mankind were thence dispersed, they carried systems and ideas, of common origin, to the most widely separated parts of the earth.

When we consider the very remote period of time to which we can carry back our investigations, and then find among nations widely distant

from each other striking analogies in religious views and practices, such absolutely perfect knowledge of astronomy and practical geometry, highly finished, if not perfect systems of musical theory, it is seemingly incredible that these sciences, attained only by long and painful research, have been the invention of any people since the dispersion, who after having perfected their systems then communicated them to the rest of the world. Such a supposition is attended with impossible circumstances; for the powers and progress of the human mind can be reasonably estimated, and the time necessary to have perfected such abstruse and difficult sciences, and then to communicate them to all the different civilized nations of the earth, would bring the fact, if it were true, within the times of written history; which, on the contrary, refers all these matters back to periods of unknown or fabulous antiquity. Though evidently, the natural and rational explanation of the above facts, would in the very statement point out the establishment of such sciences prior to the dispersion, yet the general prejudice against considering this period of time to have been eminent for intellectual acquirements is so great that we must attempt to establish our views by some detailed arguments.

Of all the scientific attainments of ancient time, none is more important to our present investigation than the subject of astronomy; which we shall attempt to use as establishing the points for which we have contended in our preceding paragraph.

Though we have sufficient proofs to establish our doctrine in the learned writings of Bailly, Playfair, and others, yet as we think it an important matter to multiply proofs, we shall use some argument derived from our own reading, which it appears to us has not been hitherto brought before the public.

If the reader remembers our observations (page 218) upon the famous cycle of six hundred years, which we have there considered of antediluvian origin, he will perceive that with the plausible conjectures we have been enabled to make upon that cycle, there can be no room to doubt, that it was founded upon an almost exact knowledge of the length of the tropical year. We shall not repeat our observations, nor shall we at present consider it with Josephus, Cassini, and Bailly, to have been of antediluvian origin, until we can with a direct plausibility refer it to that period of time. I think, there are circumstances of ancient chronology that will enable us to bring this matter by fair induction to such an era.

I cannot doubt, that the famous Yugs of the Hindus have been constructed upon this cycle of six hundred years, which I trust the following view will render sufficiently apparent.

According to the best authority, *As. Res.* xii. 251, there are two modes of exhibiting the Yugas of the Hindus, which the learned author, there distinguishes, though I apprehend incorrectly, by the appellations of astronomical and poetical Yugs. But as it is important that a distinction should be made between them, let us retain these terms.

The scheme of the Yugs, then are,

ASTRONOMIC YEARS.			POETICAL YEARS.	
Sata Yug	4,800	equal to	1,728,000	
Treta "	3,600	"	1,296,000	
Dwapar "	2,400	"	864,000	
Cali "	1,200	"	432,000	
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Mahayug	12,000	"	4,320,000	

The astronomic Yugs are but multiples of the cycle of six hundred years, which will be perhaps more evident to the reader if we reverse their order, thus:

Cycle of 600	×	2	⇒	1,200	or	Cali Yug.
"	"	×	4	⇒	2,400	" Dwapar "
"	"	×	6	⇒	3,600	" Treta "
"	"	×	8	⇒	4,800	" Sata "

The poetical Yugs, are formed by multiplying the years of the astronomic yugs, by three hundred and sixty, as may be seen in the preceding statement.

Though I consider these Yugs as answering among the ancient Hindus a purpose similar to that of our astronomic tables, I am not able to satisfy myself of their particular use except in one instance, which establishes a very important fact. I think, the period of the Sata Yug, in addition to its construction upon the scientific period of six hundred years, also manifests itself to have been a perfect cycle* for the intercalation of bissextile days, or their equivalent. The proof of this supposition may be seen in any of the more recent calculations upon the Gregorian calendar, in which it will be found, that the most perfect system of intercalation, is that of 41,851 days in the course of 172,800 years. Now, this period of time is exactly the Sata Yug, saving the addition of a single *zero*, which was thrown off probably by a divisor of 10. The extraordinary coincidence exhibited in the repetition of the numbers of these two periods of time, is too evident to be considered as in the least degree fortuitous.

Now, with the preceding data, let us make a chronological investigation. The earliest account I have seen of the Yugs of the Hindus, is that of the Institutes of Menu, a work according to Sir William Jones, that was composed about one thousand two hundred and eighty years B. C. There is no reason to think, that the invention of these astronomic periods were of equal date with the Institutes of Menu; they may have been much more ancient, but at any rate, they cannot be later than that time. It is an easy question then to ask, what would be the shortest space of time prior to that date, in which we can believe the cycle of six hundred years, and system of the Yugs, could have been brought to such a system of absolute perfection, as they are stated in the Institutes of Menu. I apprehend at the least, that two cycles of six hundred years must have elapsed, before the astronomers inventing the period could have been satisfied with its accuracy. This supposition, therefore, would carry us back to the origin of astronomic observation, and place it B. C. two thousand four hundred and eighty. According to the general opinion, this era is before the dispersion from Babel, but in our estimate, about one hundred and eighty years after that event.

As we claim nothing but the shortest possible period of time to have perfected this system, we shall not insist at the same time, upon the impossibility of any such perfection in human observations that no one material mistake had arisen during this shortest period of allowed time, to procrastinate the ultimate arrival at absolute truth.

But if any person will assert, that it was possible for the Hindus to have perfected their astronomic system in the space of time assumed, and that they began the subject in total ignorance of scientific astronomy; he must also explain, why all the earlier postdiluvian nations became at insulated points, equally engaged in such scientific labours. The Chaldeans, possessed a knowledge of the cycle of six hundred years from the remotest antiquity, and the Persians in their cycle of one hundred and twenty years, as we have shewn page 217, also knew the exact length of

* *Sadyhu*, in the Sanscrit, signifies *perfect*; is not this the appellation of the Yug?

the tropical year. The Egyptians have preserved an observation made upon the heliacal rising of Sirius, 2550 years B. C., and they also knew the length of the year, as far back in time as tradition has preserved a remembrance. The Mexicans also possessed this wonderfully exact knowledge. While the European nations, who had such infinite advantages in the labours of preceding time, added to a vast superiority of their instruments, were inferior in this particular knowledge to the Mexicans at the time of the conquest.

But we can attain to a chronology still more favourable to our hypothesis, by investigating the era of the Cali Yug as established among the Hindus.

The Cali Yug, which is the present and fourth age of the world according to the Hindus, commenced at a moment of time very remarkable for the origin of an astronomic epoch. It is affirmed by the Hindus to have begun 3102 years B. C., at the instant of midnight, between the 17th and 18th February, O. S., in the year of the Julian period 1612; at which time the planets were in a line of mean conjunction in the beginning of Aries, on the meridian of Lanka, (about $75^{\circ} 50'$ E. of Greenwich.)

The most condensed as well as the latest arguments upon this subject are those of the late Professor Playfair, which we shall extract as far as necessary to elucidate our subject from the elegant article *ASTRONOMY*; Edin. Encyclopedia. A detailed and extensive view is given by the professor himself in vol. ii. 135, Trans. Edin. Society.

"If the epoch of 3102 is fictitious, and has been determined by calculation from observations of a modern date, the mean places of the sun and moon, assumed at that period, the inequalities in the motions of those luminaries, the obliquity of the ecliptic, the length of the tropical year, and the places of the fixed stars, must all differ from their real values, or those which would have been ascertained from actual observation, by quantities depending in some measure on the errors of the modern epoch, but chiefly on those minute variations arising from the theory of gravity, which the elements themselves have undergone, and which were discovered only towards the close of the 18th century. If we should therefore find, that all these elements as assumed at the epoch of 3102, are nearly the same as if they had been then determined by observation; or, as if they had been deduced from a modern epoch by calculations involving the acceleration of the moon, the variation in the precession of the equinoxes, the change of the obliquity of the ecliptic, &c. we have only two alternatives, either to believe that the epoch of 3102 is real, and the Indian astronomy of high antiquity, or that the Brahmins at the period of the modern epoch, were completely acquainted with the theory of gravity, and with all the refinements of modern analysis.

"From the delineation of the zodiac, for example, which La Gentil brought from India, it appears, that the star Aldebaran was 40 minutes before the vernal equinox in 3102; now if we take the precession of the equinoxes at $50\frac{1}{2}$ seconds, and employ the inequality in the precession discovered by La Grange, we shall find by calculating from the place of Aldebaran in 1750, that in the year 3102, this star was 13 minutes beyond the vernal equinox, a result differing only 53 minutes from the Indian zodiac. But the force of this argument does not terminate here; even if the Brahmins had been acquainted with the inequality of precession, and had applied it to the modern epoch of 1491 B. C. the 3 seconds of excess which they gave to the precession itself, would have produced an error of $3'' \times 3102 + 1491 = 3^{\circ}, 49' 39''$, at the epoch of 3102.

"The mean longitude of the sun, according to the Brahmins at the epoch of the tables of Tirvalore, is $10^{\circ}, 3^{\circ}, 38', 13''$, and according to

the modern tables corrected by the inequality of precession discovered by La Grange, and amounting in the present case to $1^{\circ}, 45', 22''$, the longitude of that luminary is $10^{\circ}, 2^{\circ}, 51', 19''$, differing only about 47 minutes from the determination of the Indians. The longitude of the moon at the same epoch by the Tirvalore tables, is $10^{\circ}, 6^{\circ}, 0'$; and the same computed from the tables of Mayer, and corrected by the moon's acceleration, is $10^{\circ}, 6^{\circ}, 37'$, a coincidence so remarkable that it could arise only from actual observation. Now if we compute the places of the sun and moon at the commencement of the Cali Youg, from the tables of the Greek and Arabian astronomers, or from those of Ulugh-Beigh, which were constructed at Samarcand in 1437; we shall find, that the tables of Ptolomey give an error of 11° in the place of the sun and moon, while the tables of the Tartar prince produce an error of $1^{\circ}, 30'$, in the place of the sun, and of 6° in that of the moon. These results give additional strength to the former argument, and completely prove that the Indian astronomy is not the offspring of Greece or Arabia, and that the epochs of the Tirvalore tables were not deduced from modern observations. Arguments of a similar nature, and equally strong with the preceding, might be deduced from the obliquity of the ecliptic, the length of the solar year, the aphelion and mean motion of Jupiter, and the mean motion of Saturn, and the equation of his centre, as contained in the Indian tables; but for this information we must refer our readers to the writings of Bailly and professor Playfair.

But important as the preceding facts may seem to be in establishing our theory, that certain mathematical and physical sciences, were known to wonderful perfection before the dispersion from Babel, we are not obliged to rely for our proof in this matter exclusively upon the history of ancient astronomy.

Among the ruins of time anterior to written history, we find a system of long measures common to the Egyptians, Chaldeans, Persians, Hindoos, and Chinese, which, when compared among themselves, and the ancient traditions of a measurement of the circumference of the earth, testify according to an elaborate analysis, that they are but fractional parts of a degree of the meridian, measured between the 49° and 50° of north latitude. (*Bailly Hist. Astron. Mod. Liv. iv. sec. 1, and Bailly's fourth letter to Voltaire.*)

How does it happen that these ancient nations have all the same scientific foundation for their system of measures? Can it be supposed possible that they all sent astronomers to the 49° of N. latitude to measure a degree of the meridian, that they might thus construct their measures upon a natural standard? Why did national pride among these nations, and especially among the Egyptians so far to the southward, despise the meridians of their own kingdoms so much as to prefer a measurement at the 49° degree of latitude. Or if it be supposed that this measurement was accomplished by some unknown people since the deluge, how is to be explained that all other ancient nations preferred and adopted this scientific standard? Were they less proud, less bigoted, and less self-sufficient, than nations of the present time, not one of whom has adopted the French system of measures founded upon this same scientific principle.

During the same remote and unknown period of time, the abstruse theory of musical sounds appears to have been also perfectly understood, though the science itself has been preserved but in detached parts. According to the Abbé Roussier* quoted in Bailly, (*Hist. de L'Astron. Anc.*

* "Le système musical des Chinois, pris dans ses termes originaux, commence précisément où finit celui des Grecs. Si le système des Grecs and

i. 85,) the Greeks have one part of the system, and the Chinese the remainder.

We may also add, in general confirmation, that in the tombs of the kings of Thebes, whose antiquity remounts to an unknown period, Bruce (*Travels*, i. 130, 135,) observed the drawing of a harp, not only elegant in its proportions and decorations, but with its musical scale, perhaps complete. (*Burney, Hist. Music* i. 214, 227.)

After the preceding statements, I apprehended any one must be credulous indeed, who can believe that the Egyptians, Chaldeans, Persians, Hindus, Chinese, and Mexicans, were all excited by a love of science to such a degree, that they simultaneously commenced their scientific pursuits in common ignorance, and during the unknown ages of history carried them individually to such a prodigious perfection, as it is deemed we have sufficiently demonstrated.

Though we have spoken of the great and scientific exactness of the ancient astronomy of the Chaldeans, Persians, Hindus, and Mexicans, our observations are applicable only to particular parts of their knowledge; for we have not sufficient proof that any one of them maintained the entire system, which, divided among them in different proportions evidently shews an identical plan of construction. In other words; the different nations above mentioned appear to have possessed but fragments of the great system, which they do not generally appear to have fully understood, or, we might say, they followed implicitly the more obvious parts of a system that had been communicated to them without perceiving its scientific composition, but lost or neglected the use of other parts not so obviously useful or important to them.

In this shattered state has ancient astronomy descended to us, exhibiting, in the words of the Edinburgh Encyclopedia, methods of calculation without the principles on which they were founded; rules blindly followed without being understood; phenomena without their explanation, and elements carefully determined, while others more important and equally obvious are altogether unknown.

From these circumstances, Bailly (*Hist de L'Astron. liv. i. sec. 12.*) after great research, came to the conclusion that the astronomy of the Chaldeans, Hindus, Chinese, &c. was not the result of their own discoveries, but that it had been derived from some people anterior to them, who having suffered by some great revolution, had imparted but the fragments of their science, and in a shattered state, to the earlier established governments of Asia and Africa. We give an entire assent to the facts as they are stated by Bailly, though we do not agree with him as to who this original people were.

The more natural and plausible hypothesis, in our view, is to consider the scientific astronomy of the Chaldeans, Hindus, Mexicans, &c. to have been of antediluvian origin, which being preserved by Noah and his family, was necessarily communicated to his posterity; and in this manner became the common property of the human race. After the dispersion from Babel, in the consequent confusion of the then existing state of things, in the emigrations of tribes and people, in the necessary labour of re-establishing themselves in other countries, in the multiplied sources of confusion arising out of loosely constructed governments, in wars, and civil commotions, is to be found the great revolution to which Bailly and

celui des Chinois ne font ensemble qu' un seul et même système, en tout parfaitement complet; il est évident que ce tout a été système de quelque peuple plus ancien que les Grecs and les Chinois, and que ce sont les démembrements de ce système primitif qui ont formé différens systèmes chez diverses nations."

professor Playfair refer as the cause of the great deterioration of ancient astronomy, as well as of other scientific acquirements.

But when human societies had encountered and overcome all the difficulties attendant on the remodelling of their social institutions, when peace and abundance would allow the philosophical mind to contemplate the wonders of creation, and attempt to ascertain their laws; then astronomy, as well as other sciences began to revive, and such parts of the ancient system of things as had been preserved by tradition or by habitual usage,* were then drawn out into various systems of more or less perfection, and under more or less ignorance of the scientific theory which previous to the dispersion or the deluge, had united all the component parts together with consistency and harmony.

As far as we can judge, the history of ancient nations completely justifies our hypothesis. For though certain parts of the ancient astronomy of the Chaldeans, Egyptians, Persians, Mexicans, &c. are wonderfully exact, being based upon one originally common scientific system, yet their respective systems are not of this entire scientific character; shewing, that in the development of their peculiar systems, they had each proceeded upon a plan not generally common to them all; and which is, for the most part, sensibly inferior to the scientific character of the principles constituting their foundation.

Did the nature of our inquiry admit further discussion, we might shew that in the construction of the ancient calendars of the Persians, Chinese, Mexicans, &c. we cannot perceive any of the beginnings or rudiments of astronomical science, or exhibiting a rude and ignorant state of origin, such as we might suppose to have been the first attempts at constructing astronomical periods of time. I trust we have sufficiently though briefly shewn, that the small periods used by the Hindus, Persians, Mexicans, and others, which are commonly denominated months, or half months, have no reference to lunar motions as has been commonly supposed, but that they are artificial periods, entirely founded on a knowledge of the real length of the tropical year. This is evident from the regular proportion they constantly bear to the years of the great cycle, that any people choose to establish as their chronological period. See page 216. But interesting as the subject may be, we must now leave it and pass on to the consideration of other matters.

Though I cannot perceive any difficulty in considering the antediluvian ages to have been highly characterised by their intellectual attainments, yet as many persons have not been in the habit of admitting such to have been the case, it may not be amiss to call their attention to the probability of such a state of things. Proofs of the fact, beyond what has been already exhibited we have not. But there exists an absolute necessity for such an opinion to explain the history of ancient astronomy, whose per-

* We can illustrate this matter by a very familiar observation. Suppose a ship conveying emigrants from the United States to any other part of the globe, should be wrecked upon an uninhabited island upon which the crew and passengers would be saved. What state of society would exist among them afterwards? Certainly, one every way analogous to that to which they had been previously accustomed. They would continue to count every fourth February to contain twenty nine days, though they might be entirely ignorant of the reason of such a computation. And in like manner with every thing else; they would follow the ancient system of things that they had previously known or practised.

Such was the case after the dispersion from Babel. Every society of men followed with more or less exactness, the institutions, practices, &c. that had been universally known in a former age.

fection at times so shortly after the deluge, we apprehend, imperiously requires such an hypothesis.

But *cæteris paribus*; let us compare the antediluvian ages with after ages. In point of time the first amounted to 2256 years; and the numbers of men far exceeded those at present. Those destroyed by the deluge, are supposed to have been upwards of 13,743,895,000,000, (*see Art. Antediluvian. Cyclopædia.*) while, according to the best computations, in the year 1800 the number of our species then only amounted to 700,500,000. Now, with the above vast numbers, and with the world in the state that it was first tenanted by man, it would surely be unreasonable not to suppose that some of the antediluvians would be as wise as any of their descendants. Did the arts owe their origin to the necessities of our nature? The superior numbers of the antediluvians certainly, then, gave them the advantage over us. Did the sciences originate in tranquillity, solitude, or society?—They had at least equal opportunities with us. Or was knowledge imparted by intuition or revelation? If so, they had the advantage over us;—for we have no account that this was done to the post-diluvians, and the theories of all writers unanimously deny it.

There were eight persons preserved in the ark, all adults and who had each lived several centuries. How could they forget the arts, the sciences, and the conveniences of life to which they had been accustomed before the deluge. Is it not infinitely more probable, that believing they would restore the human race and again repeople the earth, that they carefully preserved every thing interesting or useful to themselves or their future posterity?

When the dispersion took place, and men were scattered over the face of the earth, wherever they went they carried with them, in greater or less perfection, the sciences, the arts, the habits, and religion, that had previously been of universal establishment. That considerable diversities should exist among them afterwards is not difficult to explain. A state of great confusion prevailed at the time; emigrations to a great distance had been accomplished; individual exertion was every where necessary in supporting life; wars and schisms of various kinds took place; and amid these various causes of confusion and disorder, science was lost, numerous arts perished, religion was still further corrupted, and few, if any, could be found in the course of a few generations sufficiently qualified or disposed to write history.* As this state of things was nearly universal, a common ignorance prevailed among mankind concerning their original history, except so far as tradition, always uncertain and exaggerating, preserved a remembrance of previous events. But when human society had become regularly established in the various countries to which man had been dispersed, and when histories were written, we then find they exhibit society existing with institutions, arts, sciences, and religion, which, however

* I cannot but consider alphabetical writing to have been in use before the deluge. The Chaldeans and Hindus expressly state, that books were preserved at that time by Xisthurus and Satyavrata, and all pagan antiquity refers the invention to the earliest of their gods or heroes. The opinion that letters were first revealed at Mt. Sinai, is an arbitrary hypothesis that was never received by the Jews themselves, who attribute the invention to Abel or Enoch. Josephus expressly says, the children of Seth, before the deluge, erected two pillars upon which inscriptions were written. Joshua, when he invaded the land of Canaan, found a city there called Kirgath Sepher; "*City of Books*," and which fortunately to prevent this translation being considered ambiguous, was known also by the name of Debir, a word of like import.—Our arguments might be greatly extended if the nature of our essay permitted the inquiry.

confused and corrupted, still evidently manifest traces of having been derived from a highly intellectual state of society.

Having now shewn the intellectual character of the antediluvian ages, so far as concerns matters of philosophy and science, it yet remains for us to make some investigation concerning the religion that prevailed among mankind, prior to the dispersion from Babel; for to that period of time we must refer for the foundation or commencement of a system, that has undoubtedly constituted the basis of all those idolatrous religions which have prevailed throughout the habitable earth.

To have some defined ideas upon this subject is necessary for explaining certain very remarkable superstitions observable in the history of several American nations, which agreeing directly in substance with some of the most recondite principles of the mythology of Phœnicia, Egypt, and Hindostan, seem thereby to establish the fact, that they have all proceeded from some one original scheme of religious institution.

To prove this identity of religious system among the idolatrous superstitions of the more civilized nations of either continent, is not within the limits of our essay. That such is the fact may be seen in the writings of various authors, who have made this subject a particular object of investigation. To the works of Bochart, Bryant, Faber, &c. we refer the reader who requires express proof. Though at the same time that we quote these great authorities, we cannot help adding that their views on the subject are comparatively limited. They have not brought together a vast number of analogies that might have been procured. This we mention without the least idea of conveying an expression of censure. No one individual could ascertain the limits of this immense subject, which is continually augmented by the discovery of new facts. But with the exception of the Rev'd Mr. Faber, I am confident all preceding writers have been embarrassed by the partial theory they followed, which restricted their search after truth by compelling them to walk within bounds they had unnecessarily prescribed to themselves. Mr. Faber has far advanced beyond other labourers in this investigation, and would probably, have anticipated any observations of mine on this subject, had he but applied himself, in addition to his other vast researches, to the examination of the ancient superstitions of aboriginal America. Benefiting by his labours and his opinions, as far as my opportunities for research have allowed, I have extended his views, and in some instances, I hope not presumptuously, have made an explanation of certain superstitions, differing from those given by him in his learned work on the origin of idolatry. Whether I am correct or not, must be referred to the judgment of the literary and religious world.

I shall make no mention of those matters concerning which an avowed identity is admitted; my object being only to explain, if possible, certain superstitions observable in the religions of several demi-civilized American nations, concerning which I have seen no explanation hitherto given.

That the order, harmony, and mechanism of the universe, indicates the existence of a God, I believe indisputable by any one in the possession of his senses. But if mankind through the mere light of nature, should perceive the necessity of the existence of a God to explain the fact of his works, I cannot see any reason, why they should deem it their obligation to worship him, and certainly much less, why they should universally agree to perform their religious service, in the same system of dogmas, rites, and ceremonies, the explanation of which depends upon an arbitrary theory, involving not only the circumstances of our present life, but more particularly, a state of existence after death; a supposition in every particular contrary to the direct evidence of our senses. Therefore, when we

find mankind, universally, not only worshipping a God as the author of all good, with prayer and continual efforts to attain moral purity, I must be permitted to ask, why there exists so universally the prejudice that their God hears them, and is willing to increase their happiness? Surely nothing in nature will communicate such an impression, and as to a reward for just and merciful actions to our fellow creatures, history hardly informs us of any other particular, than that the violent and the unjust, the deceitful and the bold, attain to those honours and enjoyments, which in the general opinion of mankind constitute the greatest degree of happiness.

If then we cannot find a solution of these very first principles of religion in the theory of natural religion, it is in vain to search in its influences, for the reason why man universally admits himself to be a fallible peccant creature, responsible in a future state to his maker for the good or evil actions of life; and much less, that he should universally attempt to propitiate his gods, by the sacrifice of an animal devoid of intellect, who is unconscious of the act by which it is devoted, and the shedding of whose blood would apparently be an act of unmeaning cruelty.

But the further we extend our researches into the rites, ceremonies, and dogmas of paganism, the more we are convinced of the unity and identity of its institutions; and as we cannot find an adequate solution of these facts in natural religion, we must refer them to some one ancient original scheme. Nor can we long hesitate to say from what system all human religion has arisen; for the many analogies existing between paganism and the religious dogmas and institutions of the Bible, abundantly shew, however inexact our view of the subject may be, that the doctrines and history, mostly religious, of the scriptures, have an evident and material connexion with the institutions of paganism.

So remarkable are the analogies existing between the rites and institutions of the civilized pagans of antiquity, and those of the patriarchs, or of the Jews, that those persons who admit and those who deny the inspiration of the scriptures, have in their various controversies largely speculated upon the causes of these resemblances; and generally speaking, I apprehend, both sides have failed to explain the fact. The one has supposed that the Jews derived and adopted their religious observances from the pagans, but this is stopping far short of the real question; for they must not only shew us, how the mere natural intelligence of man led them to the adoption of dogmas, which I cannot see how they could possibly derive through their light of nature, as it is called; but they must also inform us, why mankind should universally adopt the arbitrary and artificial system, such as it prevails among the pagans themselves.

This has never yet been shewn by any sceptical writer, and I believe it to be impossible.

Those who have supposed that the pagans derived those matters of undoubted analogy, from the Jews, require us to attribute to these last an influence they never possessed among any nation, even those the most closely united with them. The scriptures continually upbraid the Jews with adopting idolatrous practices from the neighbouring pagans, but we never hear a word of a converse practice.

But the Jewish history is complete, and we know they did not begin to exist as a nation, until after their settlement in the land of Canaan, B. C. 1547: we cannot therefore ask, whether the pagans of antiquity lived without any religion during the preceding sixteen hundred years, for they certainly did possess one, for whose abominations the Jews were directed to destroy that part residing in the land of Canaan.

Let us look a moment at the subject. The Jews, were but descen-

dants from the patriarch Noah, as well as the pagan nations; and did God, who had destroyed the antediluvian world for their sins, and who preserved Noah for his righteousness by an immediate miracle, who blessed him and his children, and told them to multiply and again fill the earth with inhabitants, did he at the same time deprive Noah and his family of the knowledge of that religious system, by which the antediluvian world had been judged and condemned? Is it not more reasonable to suppose, that a greater degree of light and knowledge was communicated to them, in addition to that which they had previously possessed? I apprehend the supposition to be highly plausible; but whether this be true or not, it is impossible but that the posterity of Noah derived from, or participated with their great progenitor in some common religious system, which we cannot doubt was fully equal to all the moral responsibility of human nature. But we may certainly go further than this. As the whole human race, from the first man Adam, down to the very last man that shall be born, are all placed under similar conditions of life and death, moral accountability, and future judgment, so God's covenant with the world is of but one character. Death was brought into the world by Adam's transgression, and has fallen upon every one of his descendants. The recovery from this unhappy condition, therefore, must be co-extensive, and the covenant of God with the world must have been the same in every age. We do not pretend to say, that the same religious light prevailed in every age, exhibiting the covenant equally clear in all its features; for we know at least, that the Jewish dispensation was obscure to the one following the advent. It will not follow, however, that the patriarchal dispensation was still more obscure than that of the Jews, though this is certainly the common prejudice.

I cannot in these pages, enter upon a general inquiry concerning the degree of religious knowledge possessed by the human race either before the deluge, or afterwards until the calling of Abraham. This has been done in a most admirable manner by Mr. Faber in his work entitled *THE THREE DISPENSATIONS*; and he has there shewn, that the patriarchal ages were possessed either of a direct or typical light, upon all those subjects interesting or essential to the recovery of corrupted human nature.

Yet, it may not be amiss to ask, whether it be possible, that such personages as Job, Jethro, and Melchizedek, could have lived at different times, and in different parts of the world, while ignorance and obscure ideas of religion prevailed at the same time among the people with whom they sojourned.

Job knew a Redeemer should stand in the latter days upon the earth, and that his body should be resuscitated from the dead; and the mind is lost in the magnitude of its ideas, when we contemplate the name and character of Melchizedek.

Who was Melchizedek, that "priest of the most high God;" that King of Righteousness, and King of Peace? the lustre of whose theological character was so great, that he was ever considered the most illustrious type of our Redeemer. The prophet David declared the Messiah a priest for ever after his order; and St. Paul especially calls our attention to his greatness, as being much superior to that of the Aaronical priesthood? Was there indeed ignorance of the truths of divine religion at the time Melchizedek lived? There must be more evidence than is implied in mere silence of the scriptures, to establish this belief in my mind, did it rely alone upon the names above mentioned.

I can have no doubt, that in the patriarchal ages there did prevail a knowledge of all the essential parts of a religious system, analogous to that one contained in the scriptures, and even developed in certain parti-

culars, to an extent which will astonish many persons, when they find the various fragments brought together according to a systematic plan.

But before we proceed to the investigation of certain particulars, which we apprehend little known according to the views we shall take; we close our general view, by stating, that upon the foundations of the patriarchal covenant idolatry arose, not by a direct departure from its principles, but by gradual and insensible corruptions of doctrines, rites, and observances; an hypothesis which the unhappy frailty of speculative man has rendered abundantly plausible in the history of every wise or beneficent institution. The progress from true religion to idolatry was gradual, and not by any immediate renunciation of its obligations, and never has been so absolutely separated, but that traces of the originally pure system might be discerned amid gross corruptions. This general theory we therefore offer to explain any analogous practices or dogmas already known as existing between the doctrines of paganism and those of the scriptures.

But we consider ourselves in possession of other facts not so well known, which will give the subject a much greater importance; and the correct understanding of which, is essential towards explaining certain superstitions observed among several demi-civilized people of America.

In page 240 we have mentioned an extraordinary superstition of the Mexicans, in which they made from flour, blood, and spices, an image of their principal deity; which after a mimic sacrifice was broken in pieces, and distributed as a communion among the Mexican people, who eat it with religious devotion.

Though this practice was so extraordinary as to induce the Spaniards to consider it an invention of the devil, thus aping the sacramental commemoration of christianity, yet none of them have given us the least idea of the peculiar views of the Mexicans themselves, concerning this superstitious observance. Yet it must be evident to any person reading the narration, that the people had some views or other concerning this rite, and which was so extraordinary, that no human being of any intellect could participate in the ceremony, without asking, What is the meaning of this institution?

Let us then suppose an intelligent Mexican to ask such a question from his priest, or if it may have been deemed of an esoteric nature, suppose it was a young priest asking of his superior questions to this purport:

What is the meaning of thus scenically sacrificing the god Huitzilopochtli? Was he ever sacrificed in this manner? And if he was thus sacrificed, how is he represented as a powerful deity, even the chief god and protector of Mexico? Did he again revive, and ascend to heaven a god? Why is it that the whole people are made participators in this emblematical sacrifice of our God?

Such questions we cannot doubt, were propounded to all those who had authority to instruct the Mexican priests. But where shall we find the answers? We cannot pretend to state them, and yet they are so extraordinary, and are susceptible of so direct an explanation, that few readers of this page will hesitate to say, they must be answered in a manner conformable to the great dogma of christianity, though it may seem incredible to many, that it should allude to that principle of our faith.

I will not attempt to answer these questions directly, for it will be much better, and more satisfactory, to make pagan antiquity answer them, and which I think can be done with perfect satisfaction. The inquiry also will tend to throw great light on the history of the patriarchal religion, and establish truths as being known from the earliest ages, which have been deemed chronologically of much latter times.

We have already suggested the opinion in a former page, that this scenical or typical sacrifice of the Mexican god Huitzilopochtli, was based upon some ancient dogma of nearly universal acceptance among the pagan nations; for its peculiar features appear to have been established equally among the Egyptians, Phœnicians, Hindus, &c. in their religious commemorations of Osiris, Adonis, Purushu, &c. It would have led us too far out of our prescribed path, to have more than alluded to these analogies when discoursing on the religion of the Mexicans. But we now propose to examine the matter in greater detail, for the evident reason, that these singular and mysterious analogies must be considered as belonging to the common history of mankind prior to the dispersion, and whose general intellectual character we have shewn has influenced to a greater or less degree the whole human race.

We assert, then, that the mystic death and sacrifice of the Mexican god Huitzilopochtli, is analogous to the mystic death, revivification, &c. of the pagan gods Osiris, Attis Adonis, Dionysius, Narayen, &c. and which we propose to establish, by a view of the religious commemoration and mystical doctrines entertained by the heathen nations of these matters, as far as we can collect important materials from the rubbish of former ages.

But though we assert the practices among all these different people, to have been founded on one original belief or institution, we do not say that the features of resemblance are in every respect precisely similar. But we shall be able, I presume, to prove this identity, by the evident agreement that exists among them all in two remarkable features, that it seems impossible could exist separately. Though we may be able to shew the one feature only among one people, and the other in another people, yet the necessary connexion of the two principles will be evident, whether we prove the one or the other.

We therefore shall proceed to shew; *first*, that very many of the ancient pagans distinctly admitted, that some one or other of their important deities had suffered a violent death; and *secondly*, that this death was either considered directly sacrificial, or that moral benefit to mankind was in a greater or less degree connected with this supposed death of their gods.

To exhibit a faithful view of this subject, I shall, as far as possible, refrain from exhibiting the facts in my own language, preferring to use the words of other writers who certainly have not entertained similar views to myself.

We shall commence with the account history has related of Osiris. Osiris, who was the chief divinity of the Egyptians, and who, according to Herodotus, with his wife Isis, were the most generally worshipped in the country, was, according to Diod. Siculus, the same as Menes or the first king of Egypt. With these particulars we have no concern any further than that he was one of the chief deities of Egypt. The tradition, however, shews him to be an allegorical personage altogether, for his history is irreconcilable with any supposition that he was either a man or king.

It is reported of Osiris, that when he was king of Egypt, and whilst engaged in philanthropic labours in Arabia, India, and Europe, his brother Typhon conspired against him, and having artfully persuaded Osiris, on his return to Egypt, to enter a chest, he together with assistant conspirators closed it fast, and then threw it into the river Nile. The chest was carried by the waves into the ocean, and finally was thrown upon the coast of Phœnicia. His consort Isis, with infinite labour and great lamentation, constantly sought the dead body of her husband, until she recovered it and brought it back to Egypt. Typhon on being apprised of this fact, opened the chest and divided the body into fourteen or twenty-six

pieces, and caused them to be carried into different parts of Egypt. Again, Isis re-collected the several members, enclosed them in a coffin, and had them interred.

Historical tradition then asserts, that Isis and Horus, made war upon Typhon, and revenged the death of Osiris; and that in honour of his memory certain mysteries were instituted.

It is altogether out of our power to go into the investigation of all the particulars of this mythological fable, and it is utterly impossible to reconcile them with the history of any real event. Orus himself, was supposed to have been treated in the same way by Typhon,* and the ancient writers as well as the moderns, have agreed to consider Typhon and Osiris, as representing the perpetual contests that take place between the good and evil principle, in which each alternately triumphs over the other. I think, however, that this supposition, though it may have some corrupted ideas of the original institution in its theory, is not the real explanation of the Egyptian practice: for we find it distinctly stated by the ancient mythologists, though they do not explain the circumstance, that Osiris after having descended to hades, again returned to life, and his soul once more animated his body. It was this circumstance that constituted the reason for the great rejoicings that took place in celebrating his mysteries. After a mimic search, with great appearance of grief and noisy lamentation, the priests exclaimed, "the lost Osiris was found, that the dead Osiris was restored to life, that he who had descended into hades, had returned from hades;" (*Plut. de Osiris and Isis, in Faber, iii. 123.*) and then they all exultingly cried out, "we have found the lost Osiris, let us rejoice together."

In like manner Adonis was commemorated in Phœnicia by mysteries almost precisely analogous to those of Osiris.

We are told (*Faber, Pag. Idol. ii. 258*,) that when Adonis was a child, Venus, or Astarte, struck with his beauty, concealed him from the other gods in an ark which she committed to the care of Proserpine. But we are also informed, that he was afterwards slain by a wild boar, and his body disappeared; in consequence of which he was sought by Venus in various countries, until the body was found in Argos, a city of Cyprus.

The rites by which this event was commemorated, were precisely similar to those of Osiris. A mimic search was made for him a certain time, until he was asserted to be found, when great rejoicings took place.

The account that Lucian has given us of this matter, is both curious and explicit.

"It was in their country, (Byblis in Phœnicia) they tell you, that Adonis was killed by the boar; in memory of which they have a general mourning once a year, and are very strict and ceremonious in the observation of it. But the very next day after their funeral offerings, as if he were come to life again, they declare him to be on a journey in the air. During this mourning they have no mercy on their own bodies, which are severely beaten, and they shave their heads as the Egyptians do for their dead Apis." (*Carr's Lucian, 723.*)

* Not only Osiris and Orus, according to Bryant, (*Anal. Anct. Mythol. iii. 345.*) had suffered death and afterwards received a renewal of their lives, but the same thing is reported of the successor of Orus, called Talus, Tulus or Tholus. It is also said of Rhameses, whom Herodotus calls Rhampsinitus, that he descended to the mansions of death, and after some stay returned to light. The anniversary of his return was held sacred and observed as a festival by the Egyptians.

Bryant thinks the above names are synonymes of Osiris, but it seems more probable to me, that though the foundation for the legend is the same, yet the preceding names are rather the mythological personages of several different people entertaining similar views with the Egyptians.

From other writers we learn, that during this celebration, a statue of Adonis in his dead state was borne in procession, accompanied with baskets full of cakes, perfumes and flowers. The people were all dressed as if in mourning, groaning and lamentations were heard all over the country, until it was announced that Adonis had been found, when universal joy succeeded to their lamentation.

There can be no reasonable ground to doubt, that the Thamuz of the scriptures was the same with Adonis; and whom Ezekiel represents as being mourned by the Jewish women.

I consider that an analogous custom prevailed among the Assyrians, which is alluded to by the prophet Zachariah, chap. xii. 10 to 14, where he mentions the mourning of Hadad Rimmon.* The use of this subject of comparison on the part of the prophet, if his figures are drawn according to our ideas of the character of Hadad Rimmon, are very extraordinary.

It will not be necessary to describe the rites or mysteries concerning Attis, who was first lamented in a similar manner, and then rejoiced for on account of his restoration to life. Nor of the rites of Dionysius or Bacchus, who was torn by the Titans into seven pieces, which were collected by Rhea, and joined together again. He also was supposed to have revived after he had descended to hades. His orgies were commemorated by previous lamentation, and then by extravagant emotions of joy, resembling enthusiastic madness.

The mysteries of Ceres, or as they are generally called, the Eleusinian, are the same in their general features with those just enumerated; but a female deity was here lamented instead of a male.† In other respects there was no material difference; for a wooden figure of a virgin was exposed to the initiated, over whom they lamented for forty days. (*Jul. Firmicus in Faber, Pag. Idol. iii. 129.*)

Before we conclude the enumeration of those facts which we have derived from the Greek writers, we beg leave to add some of those more vague and uncertain traditions which prevailed among them, which we cannot hesitate to believe, were originally based in analogous superstitions, however disjointed the fragments may now seem.

There are certain circumstances connected with the history of Linus, which justify the belief, that the Greeks, directly or indirectly, made his history analogous to that of Osiris. Mr. Faber, (*Myst. Cab. ii. 13.*), considers Linus to have been the same with the Egyptian Maneros, whom he supposes the same with Osiris. One thing is certain, that the song and tune called by the Greeks, the song of Linus, was entitled by the Egyptians Maneros; a circumstance that perplexed Herodotus exceedingly to explain, why they as well as other nations foreign to Greece, should have this tune and lamentation.‡

* Adad or Hadad, the same as Adonis. (*Jackson, Chron. Antiq. iii. 29. Note.*)

† The Eleusinian mysteries were derived from the Egyptians or Phœnicians, (*Diod. Sic. lib. 1. chap. 7.*) but the Greeks modified them to suit their own notions from a male to a female deity. At Samothrace, the divinity over whom they mourned was a male. (*Faber, Orig. Idol. iii. 131.*)

‡ "Among other things," says Herodotus, i. chap. 79. "which claim our approbation, they (the Egyptians) have a song which is also used in Phœnicia, Cyprus, and other places, where it is differently named. Of all the things which astonished in Egypt, nothing more perplexed me, than my curiosity to know whence the Egyptians learned this song so entirely resembling the Linus of the Greeks. It is of the remotest antiquity among them, and they call it Maneros. They have a tradition that Maneros was the only son of their first monarch, and that having prematurely died, they instituted these melancholy strains in his honour, constituting their first, and in earlier times their only song."

The Greek story was, that Linus had been put to death by Apollo for having dared to compare his music to that of the gods. But nothing is more absurd than that all the barbarian nations should have such a notion in common with the Greeks. We believe with the learned translator of Pausanias, that the Greeks had no distinct idea concerning Linus, and particularly that they did not know for what reason he was lamented by foreign nations. Pausanias (*lib. ix. chap. 29.*) says expressly, "indeed the death of Linus was lamented by every barbarian nation, and among the Egyptians there is a song which the Greeks call Linus, but which is denominated by the Egyptians, Maneroon. But the Greeks, and among these Homer, mention this song as Grecian. Homer, who was well acquainted with the misfortune of Linus, says, that Vulcan represented among other things in the shield of Achilles, a boy playing on the harp, and singing the fate of Linus."

"Pamphus, who composed the most ancient hymns used by the Athenians, says, that grief for the death of Linus increased to such a degree, that he was called Oitolinos, or the lamentable Linus."

Pelops, like Bacchus or Osiris, (*Faber, Myst. Cab. ii. 22.*) "is feigned to have been torn limb from limb, and afterwards to have had his scattered members joined together again; and hence he is described by Lycophron as restored to life and enjoying the pleasures of a second youth."

Mr. Faber also thinks, that the dilaceration of Hippasus by his mother Leucippa, is the same story as the history of Dionysius or Bacchus. And to similar notions he refers the history of Hippolytus, "whom Diana with the assistance of Esculapius, brought back from the infernal regions, and conveyed to the grove Arica in Italy, where he was worshipped under the name of Virbius, or twice born." The Scholia in Pers. Sat. vi. v. 56, mentions the legend thus, "nemus Dianæ (Arica) ubi Virbius colitur, id est Hippolytus, quod bis in vitam prolapsus sit."

Servius, in his commentary upon the Eneid, very justly remarks, that Virbius or Hippolytus was worshipped in conjunction with Diana, precisely in the same manner as Attis was joined to the mother of the Gods, Erichthonius to Minerva, and Adonis to Venus. (*Myst. Cabiri ii. 35, 37.*)

Bryant entertained opinions concerning Orpheus, which would refer his history to corrupted ideas analogous to those we have already stated. "The head of Orpheus (*Anal. Ant. Mythol. ii. 134.*) was said to be carried to Lemnos, just as the head of Osiris used to be wafted to Byblus. He is described as going to the shades below, and afterwards returning to upper air. This is similar to the history of Osiris, who was supposed to have been in a state of death; and after a time to have come to life. There was moreover something mysterious in the death of Orpheus; for it seems to have been celebrated with the same frantic acts of grief, as people practised in the lamentations for Thamuz and Osiris and at the rites of Baal."

The history of Prometheus, whom we consider most essentially connected with our subject, we shall introduce in a more suitable place than the present.

We also find that nations far to the east of Egypt, Phœnicia, and Greece, entertained similar mysterious doctrines concerning some god or divine personage important in their mythological systems. Thus it is stated by Major Wilford, (*Asiat. Res. x. 129, 131.*) to prevail among the Chinese Tartars.

"The followers of Buddha (*As. Res. x. 129.*) suppose that the bones or limbs of the son of the spirit of heaven, (whom Wilford considers to have been the first man re-emerging in every Calpa,) to have been scat-

tered over the face of the earth like those of Osiris and Jupiter Zagreus. To collect them was the first duty of his descendants and followers, and then to entomb them. Out of filial piety, the remembrance of this mournful search was yearly kept up by a fictitious one with all possible marks of grief and sorrow, till a priest announced that the sacred relics were at last found. This is practised to this day by several Tartarian tribes of the religion of Buddha, and the expression of the bones of the son of the spirit of heaven, is peculiar to the Chinese, and some tribes in Tartary."

"The practice of preserving the bones of Buddha, (*As. Res.* x. 131,) is of great antiquity; for it is expressly mentioned by Clemens of Alexandria, who says, that they were deposited under a pyramid."

I am not prepared to say how far the legends of the Hindoos concerning Chrishna are referrible to the present investigation. His history, remarkable in an extraordinary degree,* would bear the supposition that it has been at least modified, though we know not how far, by legends derived from some of the apocryphal gospels concerning Christ, which it has been supposed at an early period after the advent found their way into India. We therefore do not feel at liberty to use the Hindu traditions concerning this deity. But we have another matter derived from Hindu antiquity, which will greatly extend our ideas on the mysterious subject of our present research.

The reader will remember that in the commencement of this investigation, we asserted that many pagan nations of antiquity entertained the belief that some of their gods had suffered death, which was either sacrificial, or attended in some manner or other with beneficial consequences to mankind. As our proofs were to be derived from a mass of ancient fragments of mythology, it could not be expected that we should be able to shew every particular with distinctness. But we apprehended, that distinct features of the propositions we made could be perceived either in one form or the other. We again have renewed our observation previous to making the following extract, which in our apprehension conveys similar ideas to those already given from the mythology of other nations. It will be seen, that the account is but a fragment of a most curious subject which may be yet largely investigated in Hindostan.

The belief that a god had been sacrificed, is distinctly stated in the Vedas of the Hindus. For in the account given us of the *Purushamed'ha*, or mystical sacrifice of *Purusha*, it is said to be a type of the allegorical immolation of NARAYANA, or of Brahma in that character.

Purusha, signifies the "primeval man or primeval person;" and the hymn that alludes to his sacrifice, is recited among the ceremonies of the *Sradha*, or oblations in honour of deceased ancestors. Sixteen verses of this hymn are published in Moor's Hindu Pantheon, p. 75, of which we shall alone extract those that bear directly on our subject.

9. Him (*Purusha*) the gods, the demigods, named Śad'ha, and the holy sages, immolated as a victim on sacred grass, and thus performed a solemn act of religion.

10. Into how many portions did they divide this being, whom they immolated? &c.

11, 12, 13. Are answers to the question of the 10th verse.

14. In that solemn sacrifice which the gods performed with him as a victim, spring was the altar, summer the fuel, and sultry weather, the oblation.

* Chrishna is considered as the first in dignity and principal incarnation; the others (Avatars) are greatly inferior to this, and merely introduced to bring on the grand system of regeneration." (*As. Res.* x. 37.)

15. Seven were the moats surrounding the altar, thrice seven were the logs of holy fuel at that sacrifice, which the gods performed immolating, (rather binding or consecrating, *As. Res. viii. 437.*) this being as the victim.

16. By that sacrifice the gods worshipped this victim. Such were primeval duties, and thus did they attain heaven, where former gods and mighty demigods abide."

The Hindu commentary upon this hymn, has not been translated by Mr. Colebrook, to our great regret, though he says "it does not really elucidate the sense," (*As. Res. viii. 436.*)

We have learned, however, that the *Purushamedha* is an allegorical representation of the "immolation" of Narayana, or Brahma in that character. This is very surprising, for Brahma is the first one of the Hindu Triad, and Narayana, is strictly the *spirit of God*, whom the Hindus have personified under that name.*

A passage in the *Hitopadesa*, (*Moor, Panth. 80.*) speaks of Narayana as Brahma, comprehending in himself the three great powers or personifications. "The great and mighty Lord Narayana, the author of creation, preservation, and destruction; he will wipe away our sorrows."

Traces of an analogous belief in the death of a god having taken place, is also discernible in the mythology of the ancient Scandinavian nations. For, however the original theory of this fact may have been corrupted, I cannot but think, that the story concerning Balder related in the Edda, refers to the same subject which we have already seen has influenced the mythological systems of the Mexicans, Egyptians, Phœnicians, Hindus, &c. At any rate, this fact is evident that Balder was a god, and he was slain by the evil designs of the evil principle. The whole story may be seen in the translation of the Edda annexed to the English translation of Mallet's *Northn. Antiq. ii. 138, 149.* We shall only give an abstract of the legend.

Balder, who was the second son of Odin, was remarkable among the gods for the beauty of his person, and the excellency of his virtues.

From a dream Balder found his life was exposed to imminent danger, and to avert the catastrophe the gods extracted an oath of immunity from every thing that they imagined could possibly hurt him. The mistletoe plant, considered too insignificant to be brought under the influence of this universal oath, was alone disregarded. Loke, or the evil principle, took advantage of the omission, and by an artifice through its means occasioned the death of Balder. "Surely," says the Edda, "never was seen among gods or men, a crime more shocking and atrocious than this."

Balder having been thus slain, his mother Frigga offered the greatest rewards to any one that would go to hades, and offer a ransom that he should be restored to life. The perilous adventure was undertaken by Hermode son of Odin, and would have been happily accomplished but for the malice of Loke, who in the form of an old woman, of all things,

* We subjoin the following account of Narayana, from the Institutes of Menu. (*Sir Wm. Jones. vii. 92.*)

"The sole self-existing power, having willed to produce various beings from his own divine substance, first, with a thought created the waters, and placed in them a productive seed.

"That seed became an egg, bright as gold, blazing like the luminary with a thousand beams, and in that egg he was born himself, in the form of BRAHMA, the great forefather of all spirits.

"The waters are called *nara*, because they were the production of NARA, or the spirit of God; and since they were his first *ayana* or place of motion, he thence is named NARAYANA or moving on the waters."

whether animate or inanimate, alone refused to weep for the death of Balder. In consequence of this one omission, Balder was obliged to continue in hell or hades.

Yet though the circumstance is not explained in the Edda, we learn that afterwards Balder ascended to heaven: for it is said, (*Mallet, North. Antiq.* ii. 70.) "He dwells in the city of Breidablick in heaven, and nothing impure can have admittance there. Balder has his palaces in Breidablick, and there I know are columns, upon which are engraved verses capable of recalling the dead to life."

Though we yet have other matters to adduce in illustration of the present subject of investigation, it seems more convenient for us to come to some direct conclusion concerning what has been already produced. We may thus be enabled to use the advantage of a plausible theory, when hereafter discussing matters which otherwise would be involved in an unnecessary obscurity, did we postpone attempting to draw a conclusion until we had exhibited every view either direct or indirect in which our subject may be shewn.

I think, therefore, it is impossible to doubt, that the pagan fables which we have collected together from the mythology of the Egyptians, Phœnicians, Greeks, Tartars, Hindus, Mexicans, &c. can have any other basis or foundation, than in certain ideas more or less corrupted concerning the Messiah, and which, from the evident necessity of things, could only have been derived from a revelation possessed by the patriarchs.

It is impossible that mankind could have ever adopted the extraordinary notion of the death and sacrifice of a deity, unless it had been originally revealed unto them. The bare supposition of such a catastrophe would have appeared to defeat the very object of superstition, and I have no doubt, has in every age constituted the most material objection to that truth, which I believe was perfectly well known in the antediluvian and early postdiluvian ages. The fact appears to me so strongly depicted in what we have already exhibited, that I cannot apparently state it in stronger words. That so many different pagan nations, the most remotely situated from each other, and living in such different ages, should have agreed to consider that one of their most important deities had been put to death, is too extraordinary, not to have proceeded from that system of revelations connected with the history of the scriptures; and which abundantly shews, that the whole human race are, and have been at all times under one divine law and scheme of grace.

Though I can hardly presume to think that any one professing to believe the scriptures, will object to the explanation we have given of this mysterious sacrifice of deity; yet as the commonly received opinions concerning the nature of the patriarchal dispensation, do not admit that a light upon the doctrine of atonement was possessed by the patriarchs, in any degree equal to what we must now admit it to have been, I do not think it unnecessary, therefore, to make a few observations in as brief a manner as possible upon that subject.

The common opinion concerning the religion of the patriarchs, is but a human conjecture founded upon certain peculiar expressions of the Bible, which when the secret principles of paganism were scarcely understood seemed plausible enough. It is impossible, however, at this day, after the subject has been so wonderfully examined, that we can continue under such an impression. The pagans did possess a knowledge of some of the most recondite truths of our divine religion, which it is impossible they ever received except through the prophets or patriarchs of the ages preceding the dispersion from Babel.

With the knowledge which we now possess, we feel justified in assert-

ing, that it is by no means necessary to consider that the few prophecies the scriptures have incorporated with the history of the patriarchal ages, were the only ones that God had communicated to man;* or, that these few, such as they have been preserved to us, were obscure or unintelligible to them. By every principle of induction, Mr. Faber has established the view we have taken in his account of the Three Dispensations; and to his work we refer the reader desirous of light upon this interesting subject. There is but one point alone which we will attempt to establish.

At the very time that sentence of death was passed upon our first parents for their transgression, the evil spirit by whose immediate malice they had fallen, was pronounced accursed, and with the additional denunciation, that enmity should prevail between him, and a seed, or the seed of the woman, until at last he should be destroyed; or as metaphorically expressed, he shall bruise thy head, though thou shall bruise his heel.

Now, obscure as this prophecy may seem, it is nevertheless susceptible of an interpretation very intelligible, which we beg leave to state in the words of Mr. Faber. (*Three Disp.* i. 174.)

"Man had recently fallen through disobedience: and the prophecy before us, was delivered to him at his first interview with his Maker, subsequent to his apostasy. Hence it wears a very peculiar character. It is not a mere insulated and detached prediction, which might have been delivered at one time just as well as at another: but it bears immediately and directly upon the circumstances of the fall. While the agent of temptation is irrecoverably doomed to a low and abject condition, the seed of the injured woman is successfully to bruise his head, though in the conflict, the serpent should bruise his heel. Nor is it only that the prophecy stands immediately connected with the fall of our first parents: it is plainly no other than the inaugural discourse of that system of revealed religion, to which henceforth they were to be subject; it is plainly, as we now understand its meaning, the very corner stone of that only dispensation, which could be suitable to the wants of lost mankind.

"Now, if it were wholly unintelligible to Adam and Eve, and their posterity after them, where was the utility of its being delivered to them?

"A dispensation teaching the doctrine of REDEMPTION, was the only dispensation suitable to their wants." &c.

The same writer, in another page, continues this argument in the following words. "The doctrine of REDEMPTION, in some shape or other, must needs form the basis of any religion that could be suitable to the state of a fallen creature; for separated from the hope of *reconciliation*, it is plain, that any approach to God on the part of such a creature, must be altogether useless and nugatory."

But not to extend our views further upon the direct inferences that would be naturally made by our first parents upon the subject of the fall, and nature of their future religious obligations, we shall at once come to the point, by calling the reader's attention to the fact, that in the institution of animal sacrifices, the nature of the patriarchal covenant is very distinctly exhibited. For as the mere putting an animal to death, cannot benefit those who take its life, therefore to have rendered the sacrifice acceptable, it must have been offered in faith. But the exercise of faith implies its direction to a religious end or purpose, and which it is idle to suppose was kept concealed from our first parents or their immediate posterity. We have, indeed, already shewn that the pagans have preserved,

* Minute and extensive as the accounts are which are given by the evangelists of the preaching and miracles of our Saviour, yet they do not pretend to state every particular that they had heard or had witnessed. St. John expressly declares it would have been an impossible undertaking.

though corruptedly, ideas of the true doctrinal character of the Messiah, and it is impossible they could have possessed this information, unless it had been the common doctrine of mankind previous to the dispersion from Babel.

Nor is it an impertinent observation to add, that Adam and his immediate children, were saved by the same means of grace and the same plan of salvation, with those who shall be the very last of his descendants;* and therefore, when the foundation of human religion was laid, it would seem that an absolute necessity existed, that man should understand the principle upon which alone he could be reconciled to his Maker.

The doctrine of the atonement, and man's redemption, therefore constitute the substance of human religion, and which by the goodness of God becomes efficacious through an obedience to the moral law. In this form it undoubtedly existed as the religion of our first parents and the antediluvian world; until they corrupted themselves before God, who swept them away by the flood.

When the earth began to be supplied with inhabitants after the flood, Noah and his immediate children communicated the true principles of religion to their posterity, which with various rites and ceremonies, continued the religious establishment of the whole human race, though again perverted and corrupted before the dispersion from Babel. The human family being then scattered abroad over the face of the earth, carried with them wherever they went their original principles, which in the lapse of ages they more and more corrupted, until they fell into the grossest idolatry.

That idolatry had its origin in a corruption of the principles of true religion, is not only an absolutely necessary supposition arguing upon general principles alone, but we have inspired authority to infer the fact. St. Paul, (Romans, i. chap. 21 ver.) as Faber observes, does not charge idolatry as a sin of ignorance to the pagans, but says expressly, that they had once known the truth and had perverted its character.

"Because, that when they knew God, they glorified him not as God, neither were thankful; but became vain in their imagination, and their foolish heart was darkened.

"Professing themselves to be wise, they became fools;

"And changed the glory of the uncorruptible God, into an image made like to corruptible man, and to birds, and four footed beasts, and creeping things."

We shall now continue our illustrations of the mystical sacrifice of Huitzilopochtli, considering that we have a key to the superstition, which will enable us to bring together facts not only analogous in import, but confirming the views we have taken upon its original derivation.

Though the facts we have produced, speak very intelligibly of the primitive institution of these sacrifices of divinity, we are very little acquainted with the doctrine or theory the ancients held concerning the facts themselves. Among them all, this knowledge in after times, was reserved alone for those who had been initiated into those secret associations, which under different names have been termed the mysteries of Isis, of Eleusis, &c. These mysteries, at a comparatively modern time, were imported into Greece; and when this people began to babble pub-

* "From the time of the fall down to the termination of the world, man lives under one and the same system of divine grace: a system which was rendered necessary for him by the very circumstance of the fall, and which, therefore, at no one period can differ essentially from itself." (Faber, *Three Disp.* i. 1.)

licly concerning their secret assemblies, they had not only appropriated the mysterious practices or doctrines to their own motley system of theology, but they had also perverted the mysterious meeting into a convenience for debauchery and licentiousness. Yet as the ancient forms were preserved in greater or less degree of perfection, and certain rites, ceremonies, and doctrines, were avowed, we may still be able to glean some information, by examining the facts they have at different times communicated in their histories or philosophical writings.

From a partial examination of the Greek relations concerning the mysteries, learned men have at different times attempted to develop their secret purpose. But as far as I have been able to examine the writings of others, their endeavours have been attended with but partial success. Warburton, shewed (*Div. Leg. of Moses*), that one end of the mysteries, was to teach the doctrine of the immortality of the soul and a future state of rewards and punishment. These facts he did prove, though I consider his theory on the subject incorrect. Bryant, confining himself to but one particular, shewed that they commemorated certain events of the earlier history of man, and especially that of the history of the deluge and the patriarch Noah. Mr. Faber, has greatly enlarged our views. He chiefly agrees with Bryant, occasionally in the facts proved by Warburton, and has been the first, to my knowledge, to point out the funeral character* of the mysteries, which, however, I apprehend he has not successfully explained.

I am inclined, therefore, after benefiting by the observations of these great writers, to consider myself justified in stating, that they have each proved but parts of the system. I consider the mysteries, originally, to have been entirely religious in their institution, and that the doctrines taught in them were for the most part represented scenically. If they commenced with teaching the origin of religious obligations, they would begin with the generation of mankind, with the history of the fall, the general corruption of our race, the deluge of Noah, and the consequent regeneration of our species. Such doctrinal truths are essentially connected with the history of individuals prominent in the ancient history of the world. Together with these facts, they communicated all the abstract matters of their credence, and such moral sentiments as would make men wiser and better. The next stage would be, to shew the consequence of a virtuous or vicious life, which we feel justified to assert positively, was done by scenical representations of Hades, Tartarus, and the Elysian fields. In the introduction of such matters, an almost boundless field was given to men of genius and intellectual apprehensions.† Whatever knowledge in the sublimer branches of physical science they may have possessed, could be here introduced with great effect, and the accounts we have of this subject, shew how deeply they had contrived every thing that might influence the imagination of the initiated.

* "In the several mysteries of Bacchus, Adonis, Osiris, Ceres, Rhea, and the Cabiri, we uniformly find that some ancient personage was first bewailed as being dead, or as having descended into hades, and that afterwards his supposed revivification was celebrated with the most violent and frantic expressions of joy." (*Faber, Myst. Cabiri.*)

† I am persuaded from an examination of the institutions of antiquity, that tragedy and the drama, arose from the scenical representations exhibited in the mysteries. The Greeks, indeed, attributed their origin to the rural celebrations of the sacrifices of Dionysius or Bacchus. This I am not disposed to deny may have been the exciting cause of popular dramatic representations; because the subjects exhibited in the mysteries were religious, and were forbidden to be revealed to the uninitiated. But the obvious machinery by

"Accessi," says Apuleus, describing the ceremonies that attended his initiation, "Accessi confinium mortis; et calcato Proserpine limine, per omnia vectus elementa remeavi. Nocte media vidi solem candido coruscantem lumine. Deos inferos et Deos superos accessi coram et adoravi de proximo."

As we consider the celebration of the ancient mysteries to have embraced a variety of different subjects, we shall not state them to have had any one object particularly in view, other than a religious tendency; which word religion, we use in its most extensive sense, as comprehending every subject that a corrupted tradition, or evident morality, might suppose important to man's present or future happiness.

We shall not, therefore, take any notice of those general doctrines, which appear to have been taught in the mysteries, further than as they are connected with our present subject of research.

Among the more important doctrines of the mysteries, it is evident, that they largely discussed matters concerning the immortality of the soul, and the different future conditions of the good and the vicious. This when we consider the feelings of those initiated, must ever have been esteemed the most important part of these mystic ceremonies. Every one had a personal interest in this part of the subject, while other objects would rather appear matters of curiosity.

Hence, we have the following observations upon the purport of the mysteries preserved in many of the ancient writers. According to an old author preserved by Stobæus, (*Div. Leg.* i. 235,) it is stated, "The mind is affected in death just as it is in the initiation into the grand mysteries. And word answers to word, as well as thing to thing, for *TEAETTA* is to die, and *TEAEIΘAI* is to be initiated," &c.

The Scholiast upon Aristophanes, (*Ranæ*) observes, "It was believed by the Athenians, that he who was initiated and instructed in the mysteries, should obtain divine honours after death, and therefore they all ran to be initiated."

Plato, says, it was a doctrine of the mysteries, that those who died without being initiated, stuck fast in mire and filth, but that he who was purified and initiated, at his death, should have his habitation with the gods.*

Proclus, in his book entitled, "Ten Doubts concerning Providence," informs us, that the *mysteries* evince, that certain persons are punished for the crimes of their progenitors, and that the gods who preside over expia-

which the religious scenical exhibitions were executed, was the cause that an application was made of the same instrumentalities in representing popular and familiar subjects. So closely did Aeschylus, the father of the Greek tragedy, press upon the representations of the sacred mysteries, that he nearly lost his life for the supposed impiety.

Theatres, were supposed to be under the protection of Dionysius, and were from him called *Διονυσιακα*. (*Potter's Greek Antiq.* i. 41.) And we are further informed by Diod Sic. lib. 4. chap. 1, that Dionysius or Bacchus invented plays and erected theatres. This information is in exact accordance with what is observed above; for the mysteries of Dionysius were among the most renowned celebrations of the Greeks.

In like manner, after the first establishment of Christianity, and in imitation of the pagans, religious dramas were performed before the public of a similar nature, and which only changed subjects, being still technically called *MYSTERIES*, as if to perpetuate their ancient original.

* When Diogenes the Cynic, was urged by his friends to be initiated into the mysteries of Eleusis, that his condition after death might be happy; he is reported to have said. What! shall Agesilaus and Epaminondas be among mud and dung, while the vilest Athenians, because they have been initiated, shall possess the most distinguished places in the regions of the blessed?

tions, λυσις θεσι, free offending souls from such punishment." (*Pausanias, (Trans) iii. 297. Notes.*)

The same doctrine and notion of regeneration by means of the mysteries, prevailed in those of Attis, as is evident from the institutions of the Taurobolium and Criobolium. Thus we have an ancient inscription, (*Faber, Myst. Cabiri, ii. 351.*)

DIIS. MAGNIS.

MATRI. DEUM. ET. ATTIDI.

TAUROBOLIO. CRIOBOLIOQUE. IN.

ÆTERNUM. RENATUS. &c.

In what manner this supposed regeneration of the mysteries was perfected among the initiated, or by what rite or ceremony it was consummated, it is impossible for us to state. It certainly was not attained by the observance of any moral precepts; for on this subject the mysteries could not have increased their knowledge; mere morality is a subject concerning which no conscientious man can commit any mistake. He can always treat others in a manner such as he would wish them to treat him, and however much he may fall short of this rule in his practice, I believe, no individual ever lived, who was insensible to the dictates of conscience upon this subject.

I apprehend, therefore, that some peculiar rite, ceremony, or superstitions, was practised during the celebration of the mysteries, that communicated this prejudice to the initiated in some symbolical or tangible form, but of whose precise nature we cannot directly conjecture.

I should think, the most probable exhibition would be in the form of a sacrifice, in which the whole body of the initiated could partake; and sacrifices we know, did constitute a part of the mysterious celebration. Yet simple sacrifice, was a part of the common public religion of all the ancient nations, and the mere rite of sacrifice was universally practised without any initiation into the mysteries.

Perhaps the history of Huitzilopochtli will assist our research. In the Mexican superstition, the god himself was sacrificed, and the people communed on his emblematical body. Now, is it possible, that this was done in the celebration of the ancient mysteries of Osiris, Adonis, Attis, &c? Without venturing to assert the fact positively, we can, nevertheless, state that something more or less analogous appears to have been practised.

"Both in the orgies of Bacchus," (*Bryant, Anal. Anct. Mythol. ii. 12.*) and in the rites of Ceres, as well as of other deities, one part of the mysteries consisted in a ceremony called, *ωμοφαγία*, (*eating of raw flesh*), at which time, they eat flesh quite crude with the blood. In Crete, at the Dionysiaca, they used to tear the flesh with the teeth from the animal when alive. This they did in commemoration of Dionysius. In the island of Chios, it was a religious custom to tear a man limb from limb, by way of a sacrifice to Dionysius. The same practice prevailed in Tenedos. It is Propyry who gives the account. He was a staunch pagan, and his evidence on that account is of consequence."

Arnobius informs us, (*Banier, Mythol, ii. 81.*) that during the celebration of the mysteries of the Cabiri, one of the initiated was put to death. But this I consider a mistake. The sacrifice of a man may have been scenically represented, either on the person of a living man, or by means of a statue or figure representing the hero god of the mysteries; but that one of the *initiated* should have been put to death is incredible.

Similar rites prevailed among the Druids of Britain, whose mysteries we are informed by Dionysius, Strabo, &c. (*Davies, Mythol. Brit. Druids, 89.*) were celebrated with rites similar to those of Bacchus, and the orgies of Samothrace. Strabo informs us, that once a year, in a par-

ticular part of Britain, it was the custom of the women to worship Bacchus. One part of their ceremony was to unroof the temple, and again to renew the covering the same day before sunset by the united labours of all the women. If any one of them dropped or lost the burden she was carrying to complete the sacred work, she was torn in pieces by the rest, and the several limbs of their unhappy companion they carried round the temple with rejoicings proper to the solemnities of Bacchus. Of this cruel rite, Strabo says, there always happened some instance, whenever the annual solemnities were celebrated. (*Davies, Mythol. B. Druids*, 169.)

Such rites as Strabo has described, would soon have put an end to these frantic orgies. He certainly must have misunderstood the relation made to him. I therefore presume that something analogous to this supposed dilaceration was exhibited, and by consent of the initiated, the lot may have fallen upon the first one to whom any accident occurred. That the dilaceration was literal, it is impossible to believe; for who would have ever risked an initiation into such mysteries?

I apprehend we have as far as our opportunity permits, plausibly shewn, that a human sacrifice was either made scenically in the person of a living man, or by means of an artificial statue suitably decorated. With great propriety, therefore, the Mexicans made their statue of such substances as could be eaten; for being a gross people in their general practices, they did not regard with any disgust the portion of blood which united the composition together; and which in an evident manner signified its typical constitution. The practices of the Hindus in their celebration of the Purushamed'ha, implies a similar notion; for we are told this ceremony could be only performed emblematically, "it being necessary to eat the sacrifice, yet no one could be required to eat human flesh," &c.*

* The celebration of the Purushamed'ha, as directed in the Yajush Veda, (*Moor, Hindu Panth.* 366,) is an allegorical exhibition of the immolation of Narayana. It consists in binding one hundred and eighty-five men of various specified tribes, characters, and professions, to eleven posts; and after the hymn concerning Purushu has been recited, these human victims are liberated unhurt, and oblations of butter are made on the sacrificial fire. This method of performing the Purushamed'ha, as an emblematical ceremony, and not as a real sacrifice, is taught in this Veda; and the interpretation is fully confirmed by the rituals and by commentators, one of whom assigns as a reason, "because the flesh of victims which have been actually sacrificed at a *Yajnya*, must be eaten by the persons who offer the sacrifice; but a man cannot be allowed, much less be required, to eat human flesh."

The preceding doctrine would, therefore, inevitably lead to the practice of making emblematical figures like those of the Mexicans. Hence, in the sanguinary chapter of the CALICA PURAN, (*As. Res.* v. 376,) it is expressly said: "where the sacrifice of lions, of tigers, or of the human species, is required, having made the image of the lion, tiger, or human shape, with butter, paste, or barley meal, let them sacrifice the same as if living victims, &c."

Nothing is better known, than that the ancients instead of sacrificing men and animals, at all times, used continually images or figures for this purpose made from various substances. The practice was also of the greatest antiquity. Thus in Egypt, Amasis made a law, that only figures of men, should be offered in sacrifice; and Hercules, in Italy, substituted *waxen heads*, called *Oscilla*, instead of real men, (*Banier Mythol.* i. 261.) The poorer Greeks were allowed to offer an image of an ox made of flour, (*Potter, Antiq.* i. 219.) The Egyptians also, according to Herodotus, lib. ii. ch. 47, did the same. Hyde (*Rel. Vet. Pers.* 254,) says, the Persians at a particular festival, "*conficiebant ex pasta aut luto imagines, easque in compitis colocantes, eis omnia servitia præstabant sicut regibus fieri solebat: et deinde easdem comburebant*"

We have shewn that the people of Guatemala, the Peruvians, and the old Sabæans, pages 241, 313, 394, performed a religious service, with ceremonies which we do not doubt were further corruptions of the original practice, or rather more obscurely understood. I think, however, that these facts will tend to shew, how natural it would be to make a similar symbolical sacrificial food of more palatable materials, and such, I am inclined to consider were the numerous cakes, used in the secret mysteries of the ancient pagans, who going still farther than the others we have mentioned, not only made them symbolical, but used them as dainties.* We have some reason to infer their typical character, from the fact I have seen quoted from Clem. Alexand., who says, the cakes used in the celebration of the Eleusinian mysteries were moulded into the shape of parts of the human body.

I think, therefore, from our preceding investigation, we are justified in believing that one part, and that deemed a most important part of the ancient mysteries, was employed in representing more or less distinctly, the sacrificial death and revivification of one of their divinities; and so apparently was this feature exhibited, that Mr. Faber, (*Myst. Cab. ii. 341.*) observes, "Julius Firmicus joins together with great propriety the mysteries of Bacchus, Proserpine, Attis, Osiris, &c. describing them all as equally mournful, and equally commemorative of some supposed death."

The fact itself is so explicitly stated, that it cannot be set aside. "Julius Firmicus (*Faber, myst. Cabiri, ii. 353.*) says, a statue was laid out upon a couch *as if dead*, and was bewailed with the bitterest lamentations. When a sufficient space of time had been consumed in all the mock solemnity of wo, lights were introduced, and the hierophant slowly chaunted the following distich:

Θαρσιντε μοσαι τε θες δεσωσμεν

Εσαι γαρ ημιν εκ παντων σωτηρια

Translated by Faber,

Courage ye Mystæ, lo our God is safe,
And all our troubles speedily shall end.†

But my idea of the ancient mysteries is not limited to the belief that they had this one signification alone. They undoubtedly embraced a variety of other events, both moral and physical, interesting to the history of mankind, to develop which, would require a work of equal magnitude with our whole book. I shall therefore say nothing further on this subject than I can possibly help.

I do not apprehend the views we have taken more than partially affect those of Warburton, Bryant, and Faber. I consider they have each exhibited a part of the system, and I have added another part. I may in some instances apply particular facts in a manner different from them; or rather, have exhibited them in a double or triple view, which, I apprehend is the light in which the ancients originally employed them. In other words, we yet preserve a sufficient part of the ancient allegorizing spirit of mythology, to understand their doctrines of the transmigrating system, the key to which is, that they supposed the world subject to periodical catastrophes, which destroying or absorbing all created things, again produced them in a succeeding age or period in the same forms,

* Bryant (*Anal. Anc. Mythol. i. 297, 298.*) gives a long list of these sacred cakes, which involve some very curious considerations.

† Though a very indifferent Greek scholar, I venture to suggest that this last line should have been rendered, thus: Now there is for us deliverance from misery (or distress.)

persons, and characters, such as they had previously existed. This subject has been largely exhibited by Faber, (*Orig. Idol.* i. 160, &c.)

These facts, as far as one instance may be deemed important in our present investigation, may be furnished in the history of Osiris. Many parts of his allegorical history shew him in the character of Adam, or the first man. A second part of his character has been successfully demonstrated by Bryant and Faber, to be that of the patriarch Noah, and I trust, I have shewn a third part to involve a corrupted notion of the Messiah; which I cannot doubt, was a doctrine once well known in the patriarchal ages. The Egyptians constantly represented the allegorical history of Osiris in these different aspects; of which his character as Adam and Noah, seem to be already established by the writings of others. I will introduce as briefly as possible, the facts that induce me to think, they sufficiently well recognised his triplicated character in their mysterious rites, and which I apprehend will relieve the theory of Bryant and Faber from the weight of an unexplained fact.

Considering, therefore, that Bryant and Faber have sufficiently established the diluvian character of Osiris, and thus identified him with Noah, though also in the character of Adam, (*Faber, Orig. Idol.* ii. 246.) a peculiarity that is to be observed in most of the hero gods of antiquity; what is more natural than that the ancients, if they had any notion of the Messiah, should consider this transmigrating personage, who, according to the systems of paganism, always commenced every creation or renovation of the world, to have also appeared or would appear as the Messiah, who would be the greatest of renovators? Hence, in the whole allegorical history of this transmigrating personage, they would connect whatever might be peculiar in the last character or function, with whatever circumstances they supposed had distinguished his past appearances.

That such was the real doctrine of the ancient pagans, there can be little doubt; but as we wish to be as brief as possible, we shall only adduce a similar opinion of the Jews themselves to substantiate our position. "The Rabbins teach us, that the soul of Adam successively migrated from his body into other bodies; and that as that soul had already entered into the body of David, so it would hereafter pass into the body of the Messiah." (*Faber, Orig. Idol.* iii. 301.)

In the history of Osiris, the doctrines blending together the history of Noah and the Messiah I think can be easily separated. The great father Adam, transmigrating in Noah, was surprised by Typhon, or the evil principle, and was thrown into the sea in a chest, or the ark, out of which he was taken by Isis. But I cannot see any connexion with Noah, in his being a second time subjected to the power of Typhon, who cut his body in pieces, and scattered his members over the world. To this circumstance the history of Noah affords no parallel, but it will bear a comparison with the death of the Messiah, as well as the supposed descent of Osiris to hades and his future revivification, which seems to point out that doctrine in a very particular manner.

But seemingly, the confirmation of these views with respect to the two triumphs of Typhon or the evil principle over Osiris, is distinctly expressed by the practices of the Egyptians themselves, who in a double ceremony commemorated the history of Osiris.

One of these celebrations was held in the spring of the year, when Osiris was supposed to enter the moon (*εις την Σηληνην*) the other celebration was in the autumn, when he was enclosed in a coffin (*εις την Σορον*.)

The moon was certainly a marked hieroglyphic of the ark, and so far Osiris may be recognised as Noah. But it is begging the question altogether, to consider the coffin (*σορος*) also a symbol of the ark.

One thing is certain; Plutarch says, (*Faber*, iii. 123,) that in the mysteries of Isis and Osiris, the image of a dead man was carried about in a coffin, which person however was thought to be afterwards restored to life. Now, to express such an idea, I presume, no symbol could be as significantly used as the coffin.

That this latter exhibition was understood in the sense for which we contend, is justified in the fact, that Athenagoras and Julius Firmicus, (*Faber*, *Orig. Pag. Idol.* iii. 124,) ridiculed the absurdity of the Egyptians, "who first bewail the death and burial of Osiris, and then exulting at his supposed revival, offer sacrifices to him as a god.

My impression, therefore, is, that in the allegorical character of Osiris, the Egyptians commemorated a mythological personage whom they supposed had existed as the first man or Adam, who had transmigrated in the person of Noah, and who would appear again as the great restorer of happiness on earth in that character which we technically denominate the Messiah; concerning whom they had a tradition more or less corrupted from the earliest ages of the world.

As the scope of our whole subject is of a highly interesting nature, we shall proceed to establish our view of this triple character of the chief hero divinities of antiquity, by an exhibition of the history or character of Prometheus; a personage we have hitherto but mentioned, and then referred his history to a future page.

Prometheus, in like manner as Osiris, exhibits the two characters of Adam and Noah sufficiently distinct in the apprehension of many mythologists; of whom we may especially mention Vossius, Gale, Bryant, and Faber; but there is a remarkable event in the history of Prometheus, which, with Mr. Faber, (*Three Dispens.* i. 342,) I think, can be referred to nothing but a traditional history of the promised Messiah; and in connexion with certain particulars that seem so extraordinary, that we are almost ready to doubt the evidence of our senses in this matter.

The Greek poet Aeschylus, who lived B. C. 500, has exhibited Prometheus in one of his tragedies, as bound to a rock of mount Caucasus by order of Jupiter, where he suffers the greatest torments. For what crime this punishment was inflicted, the reader may be surprised to learn in the soliloquies of Prometheus when thus exposed and suffering. This we shall extract from Potter's translation of Aeschylus. (*Prometheus Chained.*)

STRENGTH. * * * At Jove's command,
 Fix to these high projecting rocks, this vain
 Artificer of man. * * * * *
 Bind them (the manacles) around his hands with all thy force,
 Strike, nail them fast, drive them into the rock.
 * * * * * *
 Downward with all thy force enring his legs,
 Strike hard, drive deep their penetrating points.
 * * * * * *

PROMETHEUS. * * * See what, a god,
 I suffer from the gods, with what fierce pains
 Behold, what tortures for revolving ages
 I here must struggle. * * * *
 Ah me, that groan bursts from my anguished heart,
 My present woes and future to bemoan;
 When shall these sufferings find their destin'd end?
 But why that vain inquiry? My clear sight
 Looks through the future, unforeseen no ill
 Shall come on me, behooves me then to bear

Patient my destin'd fate.

* * * For favours shewn

To mortal man I bear this weight of wo:

Hid in a hollow cave, the fount of fire

I privately conveyed, of every art

Productive, and noblest gift to men.

And for this slight offence, wo, wo is me,

I bear these chains, fixed to this savage rock.

* * * * *

Ye see me bound, a wretched god, abhor'd

By Jove and every god that treads his courts,

For my fond love to man.

* * * Jove for unhappy mortals

Had no regard, and all the present race

Will'd to extirpate, and to form a new,

None save myself oppos'd his will. I dared,

And boldly pleading, sav'd them from destruction;

Sav'd them from sinking to the realms of night.

For this offence I bend beneath these pains,

Dreadful to suffer, piteous to behold:

For mercy to mankind I am not deem'd

Worthy of mercy; but with ruthless hate

In this uncouth appointment am fix'd here.

* * * Of these things

I was not unadvis'd, and my offence

Was voluntary; in man's cause I drew

These evils on my head.

None of these extraordinary expressions can be applied to the characters of Adam or Noah, and are only applicable to the Messiah, whose particular salvation of man, and simultaneous bodily suffering, seem to be distinctly discernible in this piece of corrupted tradition or mythology; for we must bear in mind, that ancient paganism was continually corrupting further and further from original principles, by all those various causes that human weakness or ingenuity, have in all ages constantly brought to bear on speculative opinions.

I consider that in this very tragedy of Aeschylus, a very remarkable corruption is expressed; for he, from some motive or other I am unable to detect, represents Prometheus to have been fastened to a *cliff* of Mt. Caucasus. But Hesiod, the oldest of all the Greek writers, says, he was fastened to a *pillar*. (*μεσσην δια στυλον*) (*Theog. l. 522.*)

Now this very remarkable legend of Hesiod's, it appears to me, may give us the key to certain ancient idolatrous practices, concerning which I have never seen even a plausible idea thrown out by any analyst of ancient mythology.

As the legendary history of Prometheus was known long before the time of Aeschylus, we perceive nothing in the Greek tragedy shewing the invention of that poet, beyond his dramatising a traditional history already known to the Greeks. If Prometheus, therefore, according to Hesiod, was supposed to have been bound to a *pillar*, and then used a language analogous to that employed by Aeschylus, there can hardly be a doubt, that his history involves a distinct though corrupted view of the character of the Messiah, and, what appears very singular, would seem to imply the very nature of his personal suffering. But can it be supposed, that such a precise knowledge was possessed in the patriarchal ages concerning the Messiah, as such an opinion would require? Bold as the position may

seem, I think, we have sufficient information from pagan history, if not conclusive enough to establish the fact, at any rate plausible enough, to exempt us from the charge of being led away by faint analogies in making such an inference.

As I think we have already shewn sufficient reason to establish the fact, that the doctrinal history of the Messiah, as a divinity sacrificially put to death, was known to the patriarchal ages, there can be no great difficulty to overcome, if we suppose the revelation that had been made on this subject to the antediluvian patriarchs, or to Noah, had also communicated the fact, if it were in no more precise terms than that the sacrificial death of the Messiah, should be accomplished by a painful and ignominious punishment. I say such an intimation, if the express fact was not revealed, which I do not consider improbable, would lead men in speculating upon such a revelation, to have anticipated it would be accomplished by crucifixion or impaling. It is rather singular, that both these punishments are expressed by the ancients in one term,* though they have generally shewn us they well understood the difference.

By all writers on the origin of idolatry it is universally admitted, that the first idolatrous objects raised by men were pillars,† yet why a pillar? this object conveys no significant idea, unless by its association with some fact or theory whose connexion with the monument is arbitrary? Some persons suppose that it was through ignorance of the art of carving that a pillar was first employed, and that as soon as greater refinement prevailed, men first cut a head on its summit, and gradually made a perfect statue. But surely all this is begging the question; for I apprehend, we have shewn that the earlier postdiluvian ages, in which idolatry commenced, were not barbarous or ignorant, but intellectual to a very considerable degree; and debased or ignorant as we can suppose it possible they may have been, yet they certainly could not be lower in the intellectual scale, than the barbarian Americans, the islanders of the Pacific ocean, or the negroes of Africa; none of which have ever lacked sufficient ingenuity to make a god from wood, clay, or stone, in the shape of a man.

But in the earliest record of human transactions, we have the history of idolatrous pillars entirely detached from any such supposed progress of idolatrous corruption. In the Bible we have this point distinctly stated.

The Jews were expressly commanded to destroy the altars, the pictures, the graven images, and the pillars, (*matzaubeh*) of the idolatrous Canaanites. It is true, that we do not precisely know what these *matzaubeh* were, and in our translation of the scriptures, the word is sometimes rendered pillars, and sometimes statues according to the notions of the translators. Let us therefore see in what sense the word is used. As I have no Hebrew concordance, I labour under the great disadvantage of being obliged to seek the different words in an English concordance, and then to examine the Hebrew text; a work so laborious, that I hope I

* The following quotation sufficiently explains the fact, if it be of any consequence to substantiate the assertion of the text. "Crucifixion being unknown to the Hindus, they have of course no name for it; and *Sula* or *Suli*, originally a stake, signifies also a gibbet or the cross, exactly like *Stauros* in Greek. It is so even in the Persian language, and so it was among the Romans. According to Seneca, crucifixion signified both impaling and extending the arms upon a cross bar, for these two modes of punishment were equally in use among them, a circumstance very little known." (*As. Res.* x. 61.)

† *Στήλας τε καὶ ράβδοις* "pillars and staves." (*Sanconiat'ion.*)

may be excused should any other than the more obvious renderings be overlooked.

Numbers xxxiii, 52; "destroy all their pictures, (משכיתם) destroy all their molten images," (צלמי מסכתם) and quite pluck down all their high places, (במותם).

Deut. vii. 5; "Ye shall destroy their altars, (מזבחותיהם) break down their images, (it should be pillars, ומצבתם) and cut down their groves; (ואשיריהם) and burn their graven images (ופסיליהם) with fire."

From the preceding enumeration, we find that the Canaanites paid idolatrous reverence to images, pictures, altars, groves, and pillars; thus shewing, that as they were acquainted with the use of images, that the pillars had an independent signification of their own. But there are two Hebrew words that are rendered pillars in our translation, the correct understanding of which is of material importance in our present investigation.

That the idolatrous pillars, (*matzaubeh*) were not architectural, is very evident, for the word עמוד, (*amod*) is constantly used to express them, as for instance, Sampson between the two pillars; Judges xvi. 25, 26, 29. Pillars of the tabernacle; Exod. xxxvi, 32, 37, 38. xxxviii, 10, 11, 12, 14, 15, 16, 17. Pillars of Solomon's temple; i. King's vii. 15, 16, 17, 21, and also metaphorically, "the pillars of the earth;" Job ix, 6. xxvi, 11. Psalm lxxv. 5, &c. these are all expressed by *amod*.

But the idolatrous pillars, (called *steles* by the 70, as they also do all other columns) are always expressed by *matzaubeh*, or *matzauboth*. This word, however, is used in other places to express the idea of a memorial pillar or monument. Thus the pillar of Jacob at Beth-el, the pillar over Rachel's grave, Absalom's pillar. Moses built an altar and twelve pillars, as memorial of the twelve tribes, &c. Exod. xxiv, 4. (these the 70 translate *λίσθεις*, not *steles*.)

These idolatrous pillars continued for a long time in Jewish history, for Jehoram removed the *matzaubeh* of Baal, translated improperly *image*, 2d Kings, iii. 2. And in 2d Kings, x. 26, by the direction of Jehu, "they brought forth the *matzaubeh* of the house of Baal, and burnt it, and they broke in pieces the *matzaubeh* of Baal." Our translators render it the images of Baal, but the 70 properly call them *steles*, pillars.

We therefore concur with Parkhurst, that the idolatrous *matzaubeh*, were "sacred memorial pillars," most probably the same as the obelisks of the Egyptians, Babylonians, &c. The next question is, what was their real use or import, or how were they religiously memorial. If we can admit with Hesiod, that Prometheus, whose character as the Messiah we have already shewn, was bound to an obelisk or pillar, we may then determine that this was their original intention, and apparently we have some reasons to urge in justification of such an idea. It has been supposed the obelisks were for astronomic uses, but considering the high perfection of astronomic science in these remote periods, this is very unlikely; for it was well known at an early period, that the shadow cast by the obelisk would make an error of the semidiameter of the sun, and hence Pliny has commemorated the Roman emperor, who placed a round ball on the top of an obelisk that had been carried to Rome, which then qualified it for astronomical use. But as none of the ancient obelisks have this ball upon their summits, we cannot suppose this to have been their original use; otherwise, the head of the obelisk would have been cut with a ball at the top, instead of being made sharp like a stake.

I know of no ancient writer but Lucian, who has informed us of any use to which the obelisks were applied.* He has communicated to us the following singular relation.

In the vestibule of the temple at Hierapolis, which Syrian tradition asserted had been built by Deucalion, stood two obelisks, which were supposed to have been erected by Bacchus. Lucian calls them *Phalli*, and informs us they were used at particular seasons, for the following singular purpose.

"Twice a year a man gets upon one of these phalli, and stays on the top of it seven days, for which various reasons are assigned. The prevailing opinion is, that he goes up to converse with the gods and pray for the good of Syria, when being so much nearer to them, he has the better chance for making them hear what he says. Some suppose it done to keep in remembrance the calamitous days of Deucalion, when men fled to the mountains, and climbed up trees to escape being drowned. These opinions to me, seem equally improbable, and I rather think, it is done in honour of Bacchus, because, *every phallus erected, has a wooden man placed upon it; indeed I do not know why:* but I believe it is in imitation of this, that the living man mounts so high; and this is his manner of doing it, &c. My climber takes up with him another long chain, which, when he has got to the top he throws down for the purpose of drawing up wood, clothes, vessels, or whatever materials he likes to make a seat with. This seat, or rather nest, is to be his habitation for the space of seven days, during which time, gold or silver, or brass at least, is brought by the people, and laid down for him to see it. Whoever brings any thing leaves his name, which a man in waiting below reports to him above, that every one in turn may have the benefit of his prayers, which he accompanies with a loud noise made by striking an ill tuned instrument of brass." (*Carr's Lucian, Syrian goddess, 743*)

If Lucian rejected the explanations given at Hierapolis concerning the meaning of this extraordinary practice, surely we may as naturally set them aside as unsatisfactory. Yet, nevertheless, the ceremony was a *religious rite*, the direct inference of which seems to me, to imply that the *priest when seated on the sharp point of the obelisk*, was considered *especially*, in the character of a mediator between gods and men.

That it was the remarkable position, alone, of the priest on the summit of the obelisk, which in the prejudice of the people rendered his prayers peculiarly acceptable, there can be no reason to doubt; for the pagans have universally believed in the omnipresence of Deity as absolutely as ourselves, and therefore in the ceremony at Hierapolis, the Syrians must have had some arbitrary hypothesis on that subject, entirely independent of ordinary ideas of worshipping their gods.

Is the superstition then gratuitous, that they originally intended to typically represent the office and personal suffering of the great MEDIATOR, whom they may have thus emblematically represented as being *impaled* on the top of the obelisk? I shall bow respectfully to the opinion that learned and ingenious men may hereafter give of this extraordinary practice; but when I consider what has been directly or indirectly exhibited even in this treatise on the subject, I cannot hesitate to express my present belief, that the ceremony at Hierapolis was founded on some traditional knowledge of the history and office of the Messiah. I do not pretend to say, that they had retained any such knowledge in their idolatrous system, but that they continued to practise a superstitious ceremony, whose original signification had been long forgotten.

* No etymology of the word *obelisk* has reached us which appears to possess any significance, the Greek word means a *spit*.

This relation of Lucian also destroys the notion that the obelisks originally represented the *phallus*, though in a latter day the ancients did affix that signification to the monument, though probably in the first instance only allegorically.

But, the god Bacchus, whose dilaceration, whose descent to hades, and whose revivification, we have already considered as a corruption of the primitive doctrine concerning the Messiah, is here, by Lucian expressly stated, to be commonly represented as a wooden figure of a man, upon an obelisk or pillar, "*the reason of which*," he says, "*he did not know*."* If these pillars had represented *phalli*, the deity would not have been on the top, but at the bottom of the monument.

These obelisks or pillars were of the most ancient idolatrous purpose. Belus and Semiramis erected them at Babylon, and as far back as antiquity can be examined, they were found in Phœnicia, Syria, and Egypt. Nor have I any doubt that the *matzaubeh* of the Canaanites, which the Jews were ordered to destroy, were of a similar use and intention. The etymology of the Lexicons alone, would justify such an opinion; yet I apprehend we are in possession of a statement made by an ancient pagan, which will throw some further light upon the subject.

In a dispute between two French philosophers, concerning the use of the obelisks, which was referred to the Academy of Inscriptions, they take notice of a passage of Josephus, (*Contra Apion*, lib. ii. ch. 2,) where he quotes Apion, who says, Moses was from Heliopolis in Egypt, and that after arriving in Palestine, among other innovations, "instead of obelisks, (ὀβελῶν) he elevated columns, which stood in a kind of boat or basin, upon whose summit was a figure or head of a man, whose shadow exhibited the course of the sun." (*Acad. des Inscrit.* ii. 276.)

Though I differ with the Academy concerning the original purpose of these columns, they very correctly state, that though Josephus refutes the charge made by Apion, it is only so far as concerns Moses, and not as regards the fact itself; which they consider to have been astronomical, and such as had been used at Heliopolis. But I apprehend that Apion was much nearer the truth than the Academy supposed, and that he alluded to the *matzaubeh*, or idolatrous pillars of the land of Canaan. His mistake consisted in ascribing them to Moses, and the Jews, who possessed the country at a later period. But they were of a much greater antiquity; for the Israelites were particularly charged to destroy them, and then only because they were *idolatrous objects*, and not scientific instruments.

Thus in an unexpected manner it would seem to me, we have attained to a knowledge of the *matzaubeh* of the Canaanites, by which it appears, they were sacred memorial pillars, which had the figure of a man placed

* As I consider this statement of Lucian's to be very important, I subjoin the Greek quotation, as correct as I am able to decipher the *ligatures* of an old edition. (Bourdelotius.)

Εν τοῖσι φαλλοῖσι καὶ ἀνδρας ξυλινες καθίζουσι, ὅτεν μὲν εἰνεκα ἐγὼ οὐκ ἐρεω; δοκεῖ δι' ὧν μοι καὶ οὐδ' ἐς ἐκεῖναι μῆμησ' ἵν' τοῦ ξυλινε ἀνδρος ἀνερχέσθαι.

On the Phalli (erected to Bacchus,) wooden men are placed, though for what reason I do not know. It is, however, in imitation of these wooden men that the man is sent up, (i. e. the obelisk at Hierapolis.)

It was no doubt from these practices, that those fanatics called *stylites* or pillar saints, of the first ages of christianity derived their origin. It was an ancient pagan rite, in a christian dress, and which Mosheim states as an almost incredible fact, continued to be practised until the twelfth century.

on their tops, and which the history of the obelisks at Hierapolis, and the mention of a similar practice by the worshippers of Bacchus, as recorded by Lucian, justifies the belief, that the figures on their summits was that of a god! I apprehend the whole view too extraordinary to admit of a solution differing from the one we have already made.

It will be carrying our views upon this general subject very little out of the way, to suppose, that other pagans than those mentioned, may have represented the death of the Messiah as occasioned by crucifixion, and it may be implied in the very account that Julius Firmicus (*Faber, Myst. Cabiri*, ii. 348,) has given us of the Phrygian mysteries, when he says, the image of a young man representing Attis was bound in a tree, "In sacris Phrygiis quæ matris deum dicunt, per annos singulos arbor pinea ceditur et in media arbore simulachrum juvenis subligatur."

After the same theory as contained in our preceding pages, I would explain the mystic signification of the cross borne by Astarte, and also venerated by Egyptians, Druids, Hindus, and Mexicans; and hence its mysterious signification of *Divine Life*, *Life to come*, *Saviour*, a *Talisman against evil Spirits*, &c. according to a kind of metonymy where the instrument is put for the effect. Nothing short of such a theory, I apprehend, can explain the singular facts we have brought together at page 332, &c.

Nor is the progress of corruption difficult to explain, why the once sacred memorial obelisk, at last signified the *phallus*. That gross figure naturally symbolizes life, and may very easily be extended in its signification, to express either regeneration or immortality. We must not forget the observation of Tertullian, already quoted in another place, that in the religious system of the pagans, "virile membrum totum esse mysterium." To this day in India, the *phallus*, or as there called the *linga*, is constantly adored; but its figure is so mystified in the representation, that the chastest eye could not discern its intention unless pointed out and explained.

I cannot but consider, that the views we have taken upon the subject of the preceding investigation are every way plausible, and that they throw a remarkable light upon the nature of the patriarchal covenant, which I presume to have been very similar both in doctrine and form to that of christianity. In process of time, however, it became so corrupted, that at the era of the patriarch Abraham, it was necessary to renew the covenant with a selected people under a typical form. Yet the Abrahamic covenant and the institutions of Moses, were but *additions* to the first covenant; for it is expressly stated by St. Paul, Gal. iii. 19, as is observed by Mr. Faber, (*Three Dispens.* ii. 136,) that when a Jewish disputant asked the Apostle, "for what purpose was the Mosaic dispensation made?" he replies, "IT WAS ADDED because of transgressions,* till the seed should come to whom the promise was made." The law or Mosaic dispensation, therefore, was *added*. But to what? Why certainly to the religion of the patriarchs with whom the covenant had been made at first. And why was it added? Because patriarchism had become corrupted in its doctrines and practices. The Jewish dispensation therefore was to serve in its types and ceremonies, not as a substitute, but as a "schoolmaster" with that chosen people until the Messiah should come, who had been from the first

* παρασάσειν, undoubtedly should be rendered *deviations*, or *corruptions*; for the verb παρασάσω, from which it is derived, signifies *to go beside*, or *deviate from a particular course*. Hesychius explains it by *not going rightly*; and in Ælian, Μη Παρασάσειν, is spoken of a charioteer, who drove so exactly as *not to deviate* from the tracks before made by his chariot wheels. See Parkhurst.

promised to mankind, and in whose atonement alone, the very foundations of religion were laid. The theory of this subject was revealed to our first parents, and they in the exercise of prospective faith looked forward to its accomplishment. In process of time, it had become entangled and corrupted with the devices of human wisdom, yet it never was entirely lost. But, neither our time nor the occasion will admit of a further examination. We must close this chapter already extended beyond what was contemplated in its commencement. We therefore terminate our present research, believing that we have while investigating the ancient idolatry of America, thus incidentally furnished some important proof of the divine origin of christianity. Though the Hebrew scriptures be silent concerning the precise doctrines of the patriarchal covenant, yet pagan antiquity has preserved at least the great features amid the gross corruptions of idolatry. From this analysis of pagan superstitions, we perceive, that the great scheme of atonement by the death of a divine personage, was known from the earliest ages of the world, and that it was prospectively viewed in many of those minutæ, which in the fulness of time occurred to him, whose divinity, character, death and resurrection, was not only established before competent witnesses, but who had themselves a miraculous testimony of their integrity in the eyes of all men, by the signs and wonders that followed them whithersoever they went.

APPENDIX II.

ON THE MONUMENTS, FORTIFICATIONS, MOUNDS, &c. OF NORTH AMERICA.

In various parts of the United States, but especially in those states watered by the Ohio and Mississippi rivers, are various monuments attesting the ancient residence of some imperfectly civilized people, who have disappeared from those situations without leaving a history or even a name behind.

It is evident from the traces of deserted towns or villages, and the large extent of cultivated grounds yet plainly discernible in many parts of the western country, that a dense population was once collected in that part of the Federal union, whose institutions and manner of life, were certainly superior to those of the Indians found in the occupancy of the country when first visited by the Anglo-Americans. But the indications of a superior social state, are perhaps, still more evident from the various rude monuments scattered over the country, which have been long known to us as the fortifications and mounds of the western states.

There is no subject of an antiquarian nature that has excited greater curiosity in the United States than these ancient monuments; and from the utter absence of tradition among the Indians concerning their history, the most ample room is left us for conjecture. The general opinion has been, that our Indian tribes were unequal to the erection of works of such magnitude, or to the manufacture of various articles found in connexion with these monuments. It has therefore been supposed, that various people of Asiatic or European descent have been anciently established in these parts of the United States, who in some remote period of time, have been swept away by the ravages of war or pestilence, and whose name and history have perished with the race.

There can be no doubt, that for the most part, few persons have been properly qualified to express an opinion on the subject, not only as being generally deficient in that kind of antiquarian knowledge, absolutely necessary to enable them to appreciate the subject under consideration, but in reality the monuments themselves are not yet sufficiently known or described; and the vague theories that have been framed upon the knowledge of some one or two monuments, will not apply to various other remains equally important and interesting. We can speak with some knowledge of this matter, from the fact of having ourselves maintained a theory on this subject a few years since, which on greater research and better acquaintance with aboriginal institutions, we have abandoned for the general views of the ensuing pages, which we trust will be found established by the number of facts we have been enabled to collect concerning these rude and ancient monuments.

Our information upon these antiquities, from not having had the agreeable opportunity of personal inspection, is entirely derived from the observation and descriptions of others, and we must in our very commencement state to the reader, that too frequently, these descriptions have been made by persons, who unfortunately possessed neither mathematical nor antiquarian knowledge sufficient to qualify them for this undertaking, however intelligent they may be in the general affairs of life. Yet, for want

of better materials, we have been compelled to use the vague, and often confused accounts, given by various writers in our newspapers and periodical journals, or an occasional book of travels, in which are described a few insulated monuments that lay in the traveller's path. Indeed, until the researches of Mr. Atwater were published in the *Archæologia Americana*, there was no collected account of these remains known to the literary world; and we feel the greatest obligation to him, for having commenced the work of drafting and describing so many interesting objects, hitherto unknown to us but by rumor and vague description. Unfortunately, Mr. Atwater's researches have not extended beyond the state of Ohio, and we are still very imperfectly acquainted with the monuments and antiquities of the states of Missouri, Illinois, Tennessee, Alabama, Louisiana, &c. which in certain particulars are very different from those found in the state of Ohio.

But though we are thus deficient in topographical and minute details, we believe that we may have sufficient information to give a general idea of these monuments, and as our purpose is chiefly to investigate their use and object, and by what people they might have been erected, a greater minuteness of information is not absolutely necessary, however desirable it might be for our general satisfaction.

It is not an easy matter to ascertain at the present time, how widely these various antiquities extend over N. America. It would seem, that there are but few traces of them north or east of the great Lakes, or east of the Alleghany mountains, until we arrive at the states of Georgia and Florida, where they occur frequently. In the states west of the Alleghanies, they appear spread over the country as far as observations have been made, and in all probability may be found until we reach the foot of the Rocky mountains.* I believe none have been seen beyond the 47° N. latitude. West of that chain, Lewis and Clark, ii. 38, describe a mound, "apparently artificial, upon which were the remains of houses;" they also take notice of a stone mound of small dimensions in another part. Beyond these we have no other account.

The late Governor Clinton, in an interesting memoir, published in the *Trans. of Lit. and Philos. Soc. of N. York*, ii. 71, describes various fortifications found in the western parts of the state of New York, which however differ considerably from those of Ohio, Kentucky, &c; for there seems to be no mounds near or connected with the forts; which also appear to be much inferior in dimensions to those of the western country. The most northern fort mentioned by Gov. Clinton, is on Sandy creek, about fourteen miles distant from Sackett's Harbour. The most eastern, those in Onondago and Chenango counties, where they are pretty numerous; from hence they seem to occur more frequently as we go west and south of Lakes Ontario and Erie.

I know of no such remains in Canada, or in New England, but in the following instances. "There is something like a fortification at Sanborn-town, (N. Hampshire,) consisting of five distinct walls, one within the other, and at Hinsdale there is something of the same kind." (*Belknap's Hist. N. Hamp.* iii. 67.)

In the other Atlantic states, unless it may be an insulated mound here and there, I believe nothing of aboriginal erection is to be found until we arrive at Georgia and Florida.

* There is a very large fortification on the banks of the Missouri opposite to Bon Homme island (lat. 42° 35') which surrounds nearly five hundred acres of ground. We were informed by our interpreters, that there are numbers of such works on the rivers Platte, Kansas, Jaques, or Yankton, &c. (*Lewis and Clark's Expedition*, i. 63.)

We shall now treat of these ancient monuments in regular order, beginning with the mounds, as being those objects that chiefly strike the attention of the traveller when passing through the western country.

The MOUNDS are heaps of earth or stone of various dimensions and shapes; some are not more than four or five feet in height, and eight or ten in diameter at the base; whilst others are forty, fifty, and even sixty or ninety feet in height, and fifteen or eighteen hundred feet in circumference. Some of them are round, others elliptical, and others square. These last are usually flat on their tops; the other kinds generally conical. The square mounds, commonly are of less height than those of other forms, and most frequently do not exceed ten or twelve feet, though in some instances, as we shall presently shew, they are supposed to rise ninety feet in perpendicular elevation.* There appears to have been especial means taken to ascend the square mounds; for we find in many instances projecting slopes from the body of the mound by which persons could easily attain the summit. Some mounds have four such slopes, others two, and the largest kind but one. The round or conical mounds, either had no artificial means of ascent, or having been made of wood they have been destroyed by the decays of time. It is most probable, however, they were not intended to be ascended.

Most commonly, the mounds are simple heaps of earth, but in a few instances, they are made of fragments of rock and stone. (*Archæolog. Americ. i. 184.*)

The mounds that have been opened, almost universally contain human bones in greater or less numbers, with various stone ornaments, weapons, pieces of pottery, and occasionally plates and ornaments of copper. We shall presently discourse concerning these various articles, but we think it proper to observe in this place, that the mounds hitherto opened appear to have been of the smaller kinds, so that it is not known whether the larger mounds also contain human bones.

We will not attempt to describe the various localities at which mounds may be seen, nor any of those smaller peculiarities by which they are distinguished from each other; for in neither instance have we sufficient information. We shall only observe, that there seems to be a material difference in the construction and position of the mounds in Georgia and Florida, from those of Ohio, Kentucky, &c. Bartram (*Travels, &c. 37, 99, 325.*) mentions groups of square mounds surrounded by walls of earth, which seemingly follow a uniform plan of construction not discernible in those of the western country. He moreover occasionally takes notice of pyramidal mounds, which are found under circumstances that remarkably distinguish them from the more common erections. Thus he says, (pages 103, 521,) "from the river St. Juan, southerly to the point of the peninsula of Florida, are to be seen high pyramidal mounds, with spacious and extensive avenues leading from them out of the town to an artificial lake or pond of water," &c.

One of these Florida monuments is thus described by that traveller. "At about fifty yards distance from the landing place stands a magnificent Indian mount. But what greatly contributed to the beauty of the scene, was a noble Indian highway, which led from the great mount on a straight line three quarters of a mile, through a forest of live oaks, to the

* Perhaps the largest mound in the United States, is one now called by the Indian traders mount Joliet, situate about forty miles west of fort Chicago, at the foot of lake Michigan. According to Mr. Schoolcraft, (*Travels, 331.*) this monument is about sixty feet in height, of an elliptical form and flat on the top, where it measures 450 yards in length, and 75 in breadth. The sides have a gradual and regular slope, but the ascent is laborious from its steepness.

verge of an oblong artificial lake, which was on the edge of an extensive level savannah. This grand highway was about fifty yards wide, sunk a little below the common level, and the earth thrown up on each side, making a bank of about two feet high." (*Bartram, Travels*, 99.)

Having thus in a very general way, taken notice of the various kinds of mounds, it only remains to say something of their relative position to each other when several are assembled together, or in connexion with other ancient monuments.

I believe no particular order has been observed in the arrangement or position of the mounds, further than that it is usual to have some of the smaller sizes placed before the entrances of the fortifications as if to protect the passages. Of the larger mounds, some are within enclosures; and others of equal, or larger size, are without. Perhaps we may be able to explain this circumstance when we come to treat more particularly on these monuments.

To enable the reader to form some idea of the arrangement of the mounds, in an instance which we apprehend to be one of the very first kind as respects magnitude of plan, we subjoin the following description of the mounds at St. Louis from the pen of Judge H. M. Brackenridge. (*Views of Louisiana*, 172.)

"I crossed the Mississippi at St. Louis," says Mr. B., "and after passing through the wood which borders the river, about half a mile in breadth, entered an extensive open plain. In fifteen minutes I found myself in the midst of a group of mounds, mostly of a circular shape, and at a distance resembling enormous haycocks scattered through a meadow. One of the largest, which I ascended, was about two hundred paces in circumference at the bottom, the form nearly square, though it had evidently undergone considerable alteration from the washing of the rains; the top was level, with an area sufficient to contain several hundred men.

"From the top of this mound I counted twenty mounds or pyramids, besides a great number of small artificial elevations; these mounds form something more than a semicircle, about a mile in extent; its diameter formed by the river.

"Pursuing my walk along the Cohokia, I passed eight others, in the distance of three miles, before I arrived at the principal assemblage. When I reached the foot of the largest mound, I was struck with a degree of astonishment not unlike that which is experienced in contemplating the Egyptian pyramids; and could not help exclaiming, what a stupendous pile of earth. To heap up such a mass must have required years, and the labours of thousands. It stands immediately on the bank of the Cohokia, and on the side next it is covered with lofty trees. Were it not for the regularity and design which it manifests, the circumstance of its being on alluvial ground, and the other mounds scattered around it, we could scarcely believe it the work of human hands, in a country which we generally believe never to have been inhabited by any but a few lazy Indians. The shape is that of a parallelogram standing from north to south; on the south side, there is a broad apron or step about half way down, and from this another projection into the plain about fifteen feet wide, which was probably intended as an ascent to the mound. By stepping round the base, I computed the circumference to be at least six hundred yards, and the height of the mound about ninety feet. The step or apron has been used as a kitchen garden by the monks of La Trappe, and the top is sowed with wheat. Nearly west is one of smaller size, and fifteen others are scattered through the plain—two are also seen on the bluffs at the distance of three miles. Several of these mounds are almost conical. As the sward had been burnt, the earth was perfectly naked,

and I could trace with ease any unevenness of surface, so as to discover whether it was artificial or accidental. I every where observed a great number of small elevations of earth, to the height of a few feet, at regular distances from each other, and which appeared to observe some order. Near them I also observed pieces of flint and fragments of earthen vessels.

"I was perfectly satisfied, that here once existed a city similar to those of Mexico described by the first conquerors. Although it might not have been a Lycopolis, Persepolis, or Thebes, it is not improbable that it contained many thousand inhabitants." &c.

The FORTIFICATIONS, as they are called, are lines of rampart generally constructed of earth, though occasionally made of stone, piled together like a stone fence, without mortar or cement. They are of very different magnitudes, some enclosing but about twenty acres, whilst others surround from one hundred and fifty, to two hundred acres of ground. These earthen walls are also arranged in various forms, some being disposed into circles, others in octagons and squares; but most commonly they are of irregular figures, chiefly occasioned by the nature of the ground upon which they are constructed.

As it is out of our power to describe these works according to their various details; we will endeavour to give a general idea of their construction and character, by a condensed view of their appearance as they commonly strike the eyes of travellers.

The walls of the fortifications, are, as we have just said, most commonly constructed of earth, which for the most part, appears to have been taken from the surface of the adjacent ground, and piled up into an embankment or wall; for there are few or no traces of ditches around them.

The height of the walls varies from five or six, to fifteen and twenty feet; differences that probably arise from the greater or less antiquity of the structure, or from the nature of the materials thus employed. Upon some of these ramparts, the marks are yet visible where a row of pickets were planted. (*Archæolog. Americ. i. 145.*)

In various parts of the walls, gates or apertures are made, behind each of which is frequently placed a small mound, constructed as it were to defend the entrance. These small mounds, from their position, evidently belong to the fortifications, and must not be confounded with those placed either within or without the walls under different circumstances of position.

Some few fortifications have subterraneous passages leading from within the walls to the banks of an adjoining river, as if to provide for a supply of water in case of a siege; but in general, there appears to have been but little contrivance to secure this necessary element within their enclosures. Perhaps, this may have proceeded from the generally high ground upon which these works are erected, which seldom allows the use of natural springs, and from the same circumstance it would have been too great a labour to sink wells. Adjacent to some fortifications, however, there are artificial wells; and in a few instances they are found within the enclosed walls. (*Archæologia Amer. i. 146, 150.*)

To enable the reader to judge of the appearance of these fortifications, we have extracted from the *Archæologia Americana*, i. 135, 146, the following description of the monuments on the Muskingum river, near Marietta; and one of the three fortifications at Paint creek; both of which are found in the state of Ohio.

The situation of the first of these works, is on an elevated plain above the present bank of the Muskingum, on the east side, and about half a

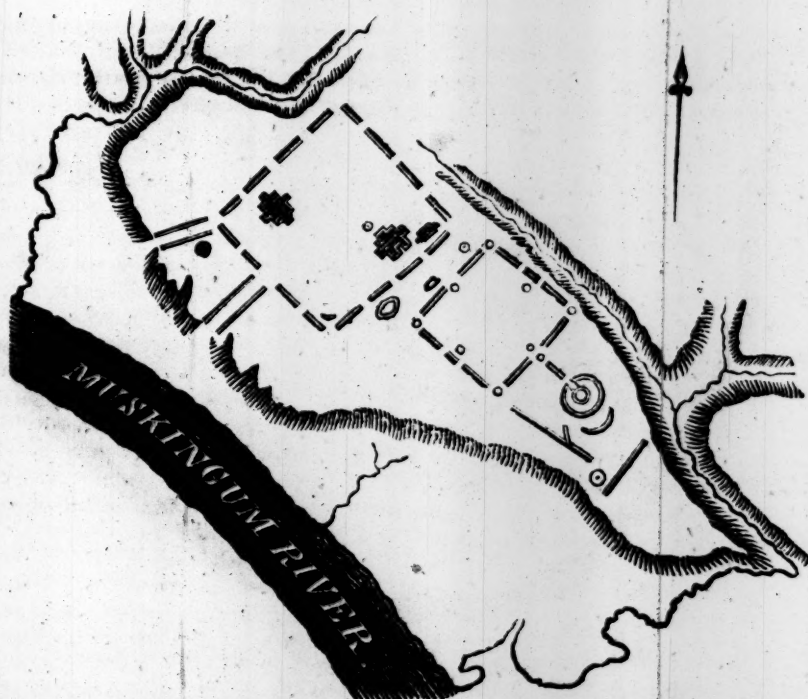
mile from its junction with the Ohio. They consist of walls, and mounds of earth, in direct lines and in square and circular forms.

"The largest square fort, by some called the town, contains forty acres, encompassed by a wall of earth from six to ten feet high, and from twenty-five to thirty-six feet in breadth at the base. On each side are three openings at equal distances resembling twelve gateways. The entrances at the middle are the largest, particularly on the side next to the Muskingum. From this outlet, is a covert way,* formed of two parallel walls of earth two hundred and thirty-one feet distant from each other, measuring from centre to centre. The walls at the most elevated part on the inside, are twenty-one feet in height, and forty-two in breadth at the base; but on the outside, they average only five feet in height. This forms a passage of about three hundred and sixty feet in length, leading by a gradual descent to the low grounds, where at the time of its construction it probably reached the river. Its walls commence at sixty feet from the ramparts of the fort, and increase in elevation as the way descends towards the river; and the bottom is crowned in the centre in the manner of a well founded turnpike road.

"Within the walls of the fort, at the northwest corner, is an oblong elevated square one hundred and eighty-eight feet long, one hundred and thirty-two broad, and nine feet high, level on the summit and nearly perpendicular at the sides. At the centre of each of the sides the earth is projected, forming gradual ascents to the top, equally regular and about ten feet wide. Near the south wall, is another elevated square, one hundred and fifty feet by one hundred and twenty, and eight feet high, similar to the other, excepting that instead of an ascent to go up on the side next the wall, there is a hollow way ten feet wide, leading twenty feet towards the centre, and then rising with a gradual slope to the top. At the south east corner, is a third elevated square, one hundred and eight by fifty-four feet, with ascents at the ends, but not so high nor perfect as the two others. A little to the southwest of the centre of the fort, is a circular mound about thirty feet in diameter and five feet high, near which are four small excavations at equal distances and opposite each other. At the southwest corner of the fort, is a semicircular parapet, crowned with a mound which guards the opening in the wall. Towards the southeast, is a smaller fort containing twenty acres, with a gateway in the centre of each side and at each corner. These gateways are defended by circular mounds."

"On the outside of the smaller fort, is a mound in the form of a sugar loaf: its base is a regular circle one hundred and fifteen feet in diameter, and its perpendicular height thirty feet: it is surrounded by a ditch four feet deep and fifteen feet wide, and is defended by a parapet four feet high, through which is a gateway towards the fort twenty feet in width. There are other walls, mounds, and excavations less conspicuous and entire, which will be best understood by referring to the annexed drawing."

* As it is of some importance to use precision of terms in the descriptions of these ancient works, let us hope the word *covert way* will not be used in any future relation of these antiquities. The word is a technical one in military language, and is never applied to a subterraneous or protected passage. In short, it pertains to fortifications having a regular *glacis*, which only belongs to works of European construction.



In addition to the above, we shall add a very concise account of one of the several fortifications, as they are called, found on Paint creek in the state of Ohio. (*Archæolog. Amer.* i. 146.) This monument consists, as will be seen on referring to the cut, of a large irregular enclosure containing seventy-seven acres of ground. On its eastern side, is a circular work containing seventeen acres, and at the southwest side, is a regular square work which contains twenty-seven acres, both of which constitute essential parts of the irregular portion.

The walls are composed of the common soil, which seems to have been taken up from no particular spot but uniformly from the surface. They are in general about ten feet in height at the present time, and through them in various parts gates or openings are made.

The circular work is said to be sixty poles (990 feet) in diameter, and in its centre is a smaller circle of about six rods (99 feet) in diameter, whose walls are now about four feet high.

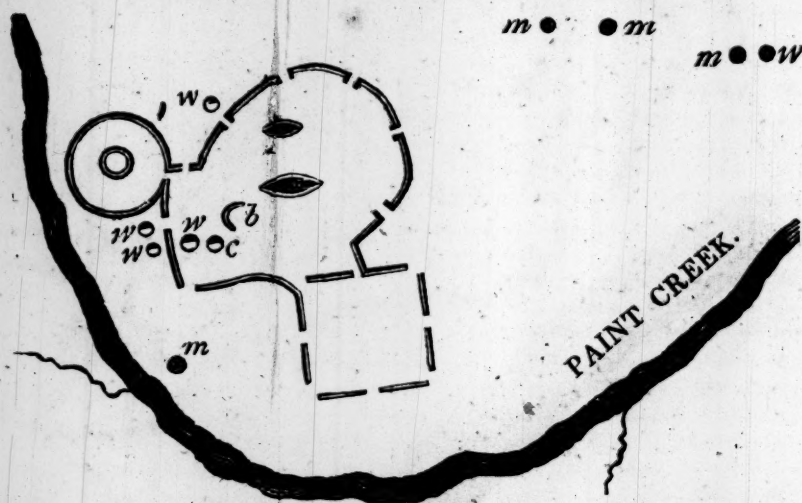
There are several ancient wells marked *w*, one of which is on the inside, the others outside of the wall. Within the irregular part of the works are two elliptical mounds; the largest of which, near the centre is about twenty-five feet in height, its longest diameter twenty rods, (330 feet) and its shortest ten rods, (165 feet) its area is nearly one hundred and fifty-nine square rods. This work is chiefly composed of rough stones, which have been brought either from the bed of the creek or adjacent hill: it also contains numbers of human bones.

The other elliptical mound has two stages, one end of it is about eight feet, while the other is fifteen feet high. Such works are not as common here as on the Mississippi and towards Mexico.

There is a work in form of a half moon, (*b*) set round the edges with stones, such as are now found about a mile distant, from whence they were probably brought. Near this semicircular work is a mound five feet high, and thirty feet in diameter, (*c*) entirely composed of red ochre, which answers very well for paint.

The wells (*w*) are very broad at the top, one of them being six rods, (96 feet) the other four (67 feet) in diameter, the first is fifteen, the latter ten feet in depth. There is water in them like the one at Marietta.

The small mounds around this monument are marked, *m*.



Several centuries must have elapsed since these various works, either fortifications or mounds, have been abandoned in the state of Ohio; for they are in numerous instances overgrown with trees, whose age as estimated from the concentric rings on their stumps, appear to be three or four hundred years old. But it may be rash to apply an equal antiquity of abandonment to all similar works throughout their extent, as some persons seem disposed to believe the case.

The different matters found on digging into these ancient monuments, have so little variety that we decline describing them, until we shall attempt to shew, by what people, and for what purposes, these various antiquities were erected.

Besides these more eminent monuments of ancient demi-civilization, there are others much less known, which indeed, have as yet but very partially excited any attention, but which constitute essential particulars in enabling us to judge of the former inhabitants of the western country. Among these may be enumerated the evident marks of ancient cultivated fields, which were observed in many parts of this section of the United States at an early period of Europeo-American history. Kalm (*Travels*, &c. ii. 278,) mentions them under the appellation of "ancient ploughed fields," which were seen by Mons. De Verandier in his journey from Canada to Louisiana.

Though there is no reason to consider them as having been worked with a plough, it is nevertheless evident that they attest the labour of an agricultural people, much advanced beyond the tribes who in our times occupied the adjacent country.* In our newspapers, I have occasionally seen accounts of similar fields in Illinois, &c.

* In the above instances as well as in other matters generally, we find an explanation of the fact in the history of the people of Florida. Bartram (*Trav.* 193) relates, that the Creek Indians, in addition to the smaller gardens that each cultivates around his habitation, possess in common large plantations more distant from their towns. These fields are worked by the whole community, though each family has its own particular part marked out, which after receiving the common labour and assistance until the harvest, is then gathered by each family for their own uses.

The remains of considerable towns are also still discernible in many parts of the states of Ohio, Indiana, &c. which have been slightly examined by some of our travellers. Near the town of Harrison, in Franklin county, Indiana, where there are many mounds of earth, are the remains of a number of stone houses, of which we have the following account. (*Brown's Western Gazetteer*, 58.) "They were covered with soil, brush, and, full grown trees. We cleared away the earth, roots, and rubbish, from one of them, and found it to have been anciently occupied as a dwelling. It was about twelve feet square; the walls had fallen nearly to the foundation. They appeared to have been built of rough stones like our stone walls. Not the least trace of any iron tools having been employed to smooth the face of them could be perceived. At one end of the building we came to a regular hearth containing ashes and coals, before which we found the bones of eight persons of different ages, from a small child to the heads of the family. The positions of the skeletons clearly indicated that their deaths were sudden and simultaneous. They were probably asleep with their feet towards the fire, when destroyed by an enemy, an earthquake, or pestilence."

The author of the *Western Gazetteer*, p. 303, says, that at Paint creek, which we have just described to be remarkable from several ancient fortifications in its vicinity, "are the ruins of a town or rather city. The cellars and the stone foundations of the houses still remain. The streets are in regular squares." The same writer also remarks, that he had himself seen the ruins of several ancient stone buildings in Ross and Pickaway counties, state of Ohio; "one of them was within a few miles of Chillicothe, near the Maysville road, and appeared as measured by the eye, sixty feet long by thirty wide; the stones were generally large and rugged, without the least mark of the hammer or any other iron tool. Six large beech and sugar maple trees were growing within the enclosure."

In Gasconade county, state of Missouri, (*Beck's Gazetteer of Illinois and Missouri*, 234,) "are also the ruins of an ancient town which appears to have been regularly laid out. The dimensions of the squares, streets, and some of the houses, can yet be discovered. Stone walls are found in different parts of the area, which are frequently covered by huge heaps of earth. Gen. Ashley informed me, that a stone work exists about ten miles distant from these ruins, which is about 25 or 30 feet square, and although in a dilapidated condition appears to have been originally built with an uncommon degree of regularity."

Of these insulated stone buildings, of which a slight mention has been made in our preceding extracts, I have been unable to procure any further information than that just given to the reader. It would seem they were merely large houses or buildings, with nothing peculiar in their construction except in having been built without mortar.* But I am inclined to think, that a more particular examination, would have shewn them

* I believe no work of undoubted aboriginal construction, has been yet discovered in the western country in which the stones were laid together with mortar. Occasionally, I have seen accounts where mortar has been used in some small erections but these I am inclined to think, have been raised by the earlier French or Spanish settlers in America. The following relation is the most remarkable instance that has occurred to my reading. "About thirty miles from Knoxville, across the Clinch river, is a cave in a place difficult of approach, the mouth of which was closed by a stone wall made of limestone and mortar, which is now harder than the stone itself. It is without doubt artificial, for besides the evidence afforded by its structure, it contains bones and animal remains." (*Siliman's Journal*, i. 430.)

to be much more curious in their form than might be at first suspected. This I would infer from the account that has been given of two stone buildings found on Noyer creek, a small stream that empties into the Mississippi, two miles below the mouth of Salt river, in the state of Missouri. These buildings are about two miles southwest of the town of Louisiana. Works of a similar kind are found on the banks of Buffalo creek, and on the Osage rivers. They are built of stone and with great regularity. The following cut and references, will explain their form better than any description. They are taken from Beck's Gazetteer of Illinois and Missouri, p. 305.

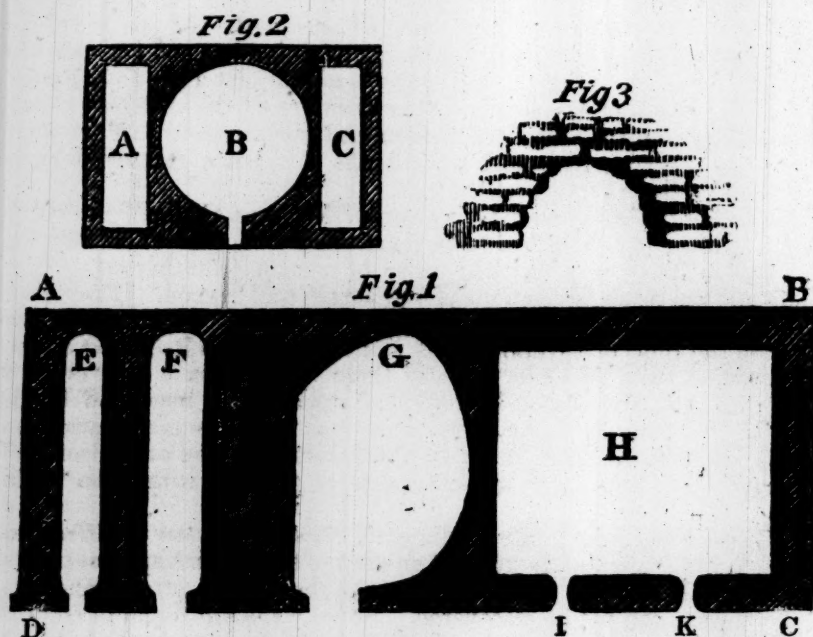


Figure 1. faces the S. E.

A. B. C. D. Outer wall, 18 inches thick, length 56 feet, breadth 22 feet. All the walls are of rough unhewn stone, and are from two to five feet in height.

E. Is a chamber three feet in width, which was no doubt arched the whole extent, as some part of the arch still remains, as is represented by fig. 3. It is at present about five feet above the ground, but as it is filled with rubbish it is impossible to say what was its original height.

F. Is a chamber four feet wide, and in some places the remains of a similar arch still remain.

G. Is a chamber twelve feet in width; at the extremity of which are the remains of a furnace. In this apartment several human bones have been found.

H. Is a large room with two entrances, I and K. It is covered with a thick growth of trees, one of which is two feet in diameter.

Fig. 2. Is a smaller work about eighty rods due east from the preceding monument.

A and C are two chambers, each three feet wide, without any apparent communication with B.

B. Is a room nearly circular, with one gate or entrance. The walls of this building are like those of Fig. 1.

It has not been deemed necessary to extend our descriptions to certain other particulars connected with the more remarkable antiquities of the western country; but by this course of proceeding, we do not intend to omit any account that may throw light upon the nature of these ancient monuments, for we shall from time to time, according to circumstances, introduce such descriptions as the nature of our disquisition may require. We shall now proceed to investigate the history and object of the antiquities we have already described; beginning with the Fortifications.

The love of the wonderful which exerts so powerful an influence upon human society, has, from the obscurity which apparently covers the history of these monuments, been abundantly gratified by the speculations of many writers upon their probable purpose and origin. Even the more judicious few that have delivered an opinion on the subject, have permitted their imaginations to mislead them by over-strained analogies, and to believe that a state of things once existed in the western country totally dissimilar to any state of aboriginal society on this continent. We shall not take the trouble to disprove the more extravagant theories of some writers on these antiquities, for they have fallen and perished in a manner, from their own absurdity. Of those views that we are inclined to consider but simply erroneous, we do not deem any deserving particular notice, except the one, which, overrating the monuments themselves, and considering the various minor antiquities found in connexion with them, as belonging to a race distinguished for a proficiency in mechanical and even scientific acquirements, would hence infer, that the states of Ohio, Kentucky, Tennessee, &c. were once inhabited by a nation eminently superior to any of the Indian tribes we have hitherto discovered on this continent.

We beg the reader, therefore, to consider us as opposed to this general theory, and to understand the observations we shall make in the ensuing parts of this chapter, to be directed against such an opinion, though we may not think it always necessary to state, that the arguments we introduce are expressly made for the purpose of refutation.

We think that opinion incorrect, that supposes the fortifications, as they are usually called, to have constituted a system of military defences to the countries where they are now found; for it is not sustained either by their military position, or by the construction of the works themselves. They appear to us to have been simple walls, which surrounded towns or villages, including also cultivated grounds; and which, we presume, were thrown up by the inhabitants, as a protection against surprisals from their enemies. But this was done without reference to any general system of presenting a fortified frontier to invading enemies, which some persons have first supposed, and then inferred the magnitude of the nation who erected these defensive works, which they commonly assume to have been been military fortifications in the strictest sense.

When we consider how natural it is for every nation to secure themselves by walls or defences of an analogous kind, and when we are aware that the incessant wars which prevailed throughout America, were chiefly carried on by skirmishes and surprisals, certainly, the most obvious course that rational beings could pursue, would be to protect themselves from such dangers, by either surrounding their towns by rows of palisades, embankments of earth, or by the use of both combined; and this is so evident, that no one expresses surprise, that the savages of America almost universally protected their villages by a strong palisade. Now, if we remember what wretched tools of stone they used before the discovery of Columbus, the very great labour of cutting pickets three, six, or nine inches in diameter, and twelve or fifteen feet in length, should

excite no wonder that they had recourse to materials which would endure a much longer time, and which could be as easily put together. For stones, or fragments of rocks, can be easily handled or rolled together, whenever the soil afforded them, or earth or clay could without much difficulty be raised into an embankment with broad pieces of bark, which the forests in every direction could abundantly supply as a substitute for spades or shovels.

The execution of the work, notwithstanding all that has been said concerning their skill and ingenuity, is only indicative of rude society. The manifest oversight of scraping the surface of the ground for materials to construct the walls, instead of making a ditch and throwing the earth inwards, whereby a double elevation would be gained with half the labour, is so evident; that I feel certain, no one can, after a moment's reflection, ascribe these structures to a people possessing any knowledge of arts, or an economy anywise superior to the general institutions of the American Indians, and certainly not surpassing the Natchez and other Indians of Florida.

The only objection that seems to oppose this view of the subject, is, that the population of our Indian nations, does not appear to have been sufficiently condensed to effect such labours, which supposes hundreds or thousands to have been systematically employed in their construction. This objection we will attempt to remove, by shewing what our Indians have actually done under similar circumstances.

When the Spaniards and French first made their settlements in Louisiana and Canada, they found the Indian villages protected both by walls and strong palisadoes, of which they have given us such descriptions, that there can be but little difficulty in identifying them in plan and intention, with those works in Ohio, and Kentucky, which have excited so much wonder. So natural did these monuments appear to the first invaders of these countries, that they seem to have expressed no surprise at the circumstance, and it was not until long after these times, when the western country fell into the possession of the Anglo-Americans, that these ancient remains excited so much surprise and curiosity.* The Indians then found in the vicinity of these monuments, had been exceedingly influenced by direct or indirect communications with Europeans, their habits and customs had been greatly changed, and their traditions in no instance remounted to the times when the Spaniards or French had first introduced themselves among them, and who, by supplying them with fire arms, hatchets, blankets and brandy, changed the nature of their wars, their economy and morals.

We shall proceed to describe by various extracts from early travellers in North America, the manner by which the Indians attempted to protect themselves from the surprisals of their enemies, which we consider affords such a mass of evidence on the subject, as will place the antiquities of the western country in a very intelligible point of view.

Beginning at the north; we find, that when Cartier, A. D. 1535, sailed up the St. Laurence to where Montreal now stands, he found in that vicinity a town of the Wyandot Indians, called Hochelaga; which is described as being round and enclosed with three rows of pickets, (*bois a trois rangs*) placed together in such a manner as to resemble a truncated pyramid; (*en facon d'une pyramide croisee par le haut*) strengthened inside, by a row of wood laid horizontally, well joined and fastened together; the whole wall or rampart being the height of two lances. (I suppose eighteen or twenty feet.) There was to this town but one entry

* Kentucky was first visited by Boone in the year 1769. And no permanent settlement was made in Tennessee until 1774.

and gate which shut with bars, over which, and on various parts of the wall or enclosure, were places, to which the inhabitants ascended by steps or ladders, furnished with rocks and stones for purposes of defence. There was within the enclosure fifty houses, each about fifty paces in length by twelve or fifteen wide. (*Lescarbot*, 336. *Hacluyt* iii. 220.)

Charlevoix (*Voyages*, 241,) says, the savages (Algonquins and Iroquois) fortify themselves better than they lodge. We see some villages pretty well palisadoed with redoubts, where they always take care to make a good provision of water and stones. The palisadoes are even double and sometimes treble, and have commonly battlements at the last enclosure; the posts they are composed of are interwoven with branches of trees that leave no place open. This was sufficient to support a long siege before these people knew the use of fire arms. Every village has a pretty large open place, (a public square) but it is seldom of a regular figure.

The Chevalier Tonti (*Collec'ns. N. Y. Hist. Soc.* ii. 264,) says, that the Indians about lakes Ontario and Erie, known how to protect their camps "with intrenchments and palisadoes."

When Soto invaded Florida, A. D. 1539, he found its inhabitants dwelling in towns well fortified; as may be seen by referring to our account of those nations, page 167, and which as we have previously described them we shall not introduce again, except in one extract from Garcilazo's account of Soto's Expedition, ii. 31. "The town of Mauvilla (in the state of Alabama,) is seated in a very pleasant plain, and surrounded by a lofty rampart palisadoed with large pieces of wood driven into the ground, with beams (*soliveaux*) laid athwart outside, and fastened inside with strong cords. The palisade was plastered over with clay mixed with long straw, which filling up every vacuity presented the appearance of a wall of mason work. About every fifty paces on this rampart, were towers capable of containing eight men, with battlements (*crenaux*) of four or five feet of earth thick."

West of the Mississippi, we still find the Sioux and other Indian nations throwing up earthen embankments around their camps or their towns. Thus Lewis and Clark (*Expedition*, i. 54,) speak of a village of the Sioux, "of which nothing remains, but the mound of earth four feet high which surrounds it."

The same travellers, (page 97,) mention an old village of the Ricaras, "surrounded by a circular wall," containing seventeen lodges, deserted by that people about the year 1802.

See also Lewis and Clark, *Exped.* i. 92, 94, 112; ii. 380, &c. for other instances.

At Prairie Le Crosse, the late Gen. Pike (*Expedition*, &c. 19,) says, he saw holes in the ground that had been dug by the Sioux when in expectation of being attacked. "They were generally round, and about ten feet in diameter, but some were half moons, and quite a breastwork. Their modes of constructing them are as follow: The moment they apprehend or discover an enemy on a prairie, they commence digging with their knives, tomahawks, and wooden ladles, and in an incredibly short space of time, they have a hole sufficiently deep to cover themselves and their family from the balls or arrows of the enemy."

Though in our opinion, we have fairly brought the fortifications of the western country into a very intelligible point of view, yet it may be objected, that we have given no account of an Indian tribe raising works of similar magnitude and extent. If we have not done this, we have shewn that the principle by which these ramparts were erected was one very generally known throughout America, and we are willing to admit, that the greater and more extensive works of this kind, have been raised by some

imperfectly civilized tribes, superior indeed to the barbarous Indians found in possession of Ohio, Kentucky, and Tennessee, &c. but who had been either driven off to other regions, or had been amalgamated into the ruder tribes, in consequence of some successful invasion of these last.

Yet with every allowance that we can concede to those who in our view over estimate these antiquities, we see but little that the ruder Indian nations could not have effected. Mr. Atwater (*Archæol. Americ.* i. 140,) remarks, that "those who are acquainted with the great depth and looseness of the vegetable mould, which lies on the surface of the earth, (in the western country) and of course the ease with which it may be raised by wooden tools, will cease to be astonished at what would be an immense labour in what geologists call primitive countries."

To this we may add, that it is evident from an inspection of the fortifications, that for the most part, they were in a manner half palisadoed works, as the numerous breaks in the rampart, or as they are commonly called gates, abundantly testify. This feature is so remarkable in many fortifications, as to induce some persons to imagine they never could have been intended as defensive works.*

With respect to that state of society, which is supposed to be very different from the North American Indians, who were too independent of law or government to unite in such slavish work as these monuments seem to require, I beg leave to observe, that the Florida Indians were as slavish in executing the orders of their Suns, as any people could be to arbitrary governors in any part of the world. But I do not know that any such state of society is necessary for raising such works. The Indians on the North West Coast of America were not an enslaved race, and yet the rafters of Maquina's house, (see page 72,) would require the combined exertions of some hundred men, to have hewn them and fixed them at their present elevation.

We also find the New Zealanders, (*Hawksworth, Voy.* ii. 377; *Nicholas, Voy. to N. Z.* i. 336,) the natives of the Tonga islands, (*Mariner*, 82,) the people of the Canaries, (*Glass, Hist. Canaries*, 9,) the ancient Germans, (*Tacitus, Mor. Ger.* xxx.) and even the wretched Bosjesmans of the Cape of Good Hope, (*Barrow, Trav.* i. 284,) all throwing up earthen or stone forts, or making walls which in some instances extend above a mile. Surely these nations were not more civilized or enslaved than our Indians, and if they could perform such works, there can be little difficulty in believing the latter might do the same, though rude, barbarous, and independent.†

Concerning the mounds, we have even more positive information than we have been able to produce on the fortifications, as will appear from the express relation of Soto's Expedition by Garcilazo de la Vega, i. 218, which we shall extract at length.

"The city and house of the cacique of Osachile, are like to those of all the other caciques of Florida, and therefore, to avoid giving a particular des-

* This is particularly remarkable in the fortification on the Little Miami river, Ohio; which has *fifty-eight gateways* according to the vulgar notion; and to account for so remarkable a circumstance, some strange suppositions have been made. I can have no doubt but that these *gateways* were once filled by strong palisadoes, which having decayed in the course of time, leave the earthen wall broken into numerous masses.

I presume, that it was these masses of earth, separated by the palisadoes, which the Spaniards under Soto called *towers*, and upon which men were placed during the time of assault to repel the invaders. See our account of Mauvilla, &c. page 167.

† Professor Pallas (*Travels*, i. 29, &c.) mentions ancient ramparts or fortifications of earth in several parts of his journey, which appear to be similar

eraption of this place, and that place, it seems best to give a general description of all the capitals, and all the houses of the caciques of this country. I say then, that the Indians endeavour to place their towns upon elevated sites, but because such situations are rare in Florida, with other conveniences for building, they elevate for themselves eminences in the following way. They choose a place to which they bring a quantity of earth, which they raise in the fashion of a platform, of the height of two or three pikes, (eighteen to twenty-five feet,) whose top will hold ten, twelve, or twenty houses, to lodge the cacique with his family and suite. They then trace at the foot of this eminence, a square place proportional to the size of the town, and round this place the more considerable people build their dwellings. The commonalty build after the same plan, and thus they surround the dwellings of their chief.

"To ascend to the chief's dwelling, they make a sloping ascent from top to bottom, by driving two parallel rows of large posts in the ground and laying beams and rafters between the posts, and thus make an ascent so gradual that horsemen can ride up and down on them without difficulty. Excepting the place of ascent, they square (escarpent) the other sides of the platform, and render it so steep that none can climb up."

This plain relation, furnishes us with every necessary information concerning the flat mounds or elevated terraces wherever they may be found, whether surrounded with walls or not. We do not, however, consider them alone erected for the accommodation of the chiefs; for there can be no doubt but some were sites for temples, as Garcilazo, the Portuguese Gentleman, and Du Pratz, abundantly prove in various parts of their writings, and which we have already quoted in our account of the religion of the Floridans, page 162.

It may not be amiss to add, that when the Natchez Indians were expelled from Louisiana in the year 1728; they crossed the Mississippi, and about six miles below Natchitoches, fortified themselves, and erected a "mound of considerable size," which is still to be seen. *Documents of President's Mess.* 1806.

The conical mounds appear, generally, to have been for sepulchral purposes; the smaller ones to commemorate individuals, whose rank or services had been favourably appreciated by their fellow countrymen; while the large conical mounds generally appear to have contained the dead of the whole town or nation. For the most part they are situated outside of the walls or fortifications. It was a very common practice with the Indian nations to inter their dead until the soft parts of the animal system were decomposed, and then every five or ten years, to disinter them, and collecting their bones bring them altogether to one place of final deposite. We have in page 115 stated this practice at length, to which the reader is referred.

That some of the western Indians still erect mounds of earth over their dead, is well known; but for direct satisfaction, we shall introduce the following relations.

"We examined" (*Lewis and Clark, Exped.* i. 43) "a spot where one of the great chiefs of the Mahas, named the Blackbird, who died about four years ago of the small pox, was interred. He was buried on a hill, and

with those found in America. This circumstance has been urged to prove the Tartar descent of our Indians, but such works are found in various other countries, as Great Britain and Germany, where they are often erroneously considered Roman encampments. Cæsar (*Bel. Gall. lib. 7, chap. xxii.*) describes the fortified towns of the Gauls to be defended by wooden and earthen ramparts, constructed very much like those of Mauvilla and other Floridan towns.

a mound of twelve feet diameter at the base and six feet high is raised over his body."

"One of the largest mounds in this country" (*Beck's Gazetteer of Illinois and Missouri*, 308,) "has been thrown up on the banks of the Osage river, within the last thirty or forty years by the Osages, near the Osage village, in honour of one of their deceased chiefs."

The flat mounds also contain some human bones, which we would suppose were those of victims that had been sacrificed and buried in the mound, to consecrate it to the invisible spirits under whose guardianship they considered themselves placed.

We consider that we have now furnished sufficient evidence to prove, that the fortifications were simple walls to aboriginal towns or villages, and that the mounds were sites for the dwellings of chiefs, for council halls, or for temples; which fancy and conceit have constructed into various shapes, and variously situated one to the other. We shall now attempt to ascertain as far as our imperfect means admit, what nation or people erected these monuments.

Mr. Atwater (*Archæologia Amer.* i. 208,) considers the skeletons found in the mounds, to be those of a shorter and stouter race than the Indians of North America.* Dr. Drake, however, who as an anatomist, was better qualified to judge of this particular, says, (*Picture of Cincinnati*, 207, 208,) that from the examination he had been enabled to make, nothing more could be inferred than a sameness in the height of the two races. He mentions some variation of the facial angle in the skulls taken out of the mound, but which he very properly considered as a matter of no importance.

In several different parts of Kentucky and Tennessee, dried human bodies erroneously called mummies, have been found, which have been very plausibly supposed to have been of that race of men who erected the monuments of the western country. I have examined several of them that have been exhibited in this city, and could see nothing in their appearance differing in the least from the general character of the American Indians. There are several notices of these desicated bodies in the *Archæol. Americ.* i. 231, 318, 362, of which we shall give the following condensed view.

"The mummies have generally been found enveloped in three coverings; first, in a coarse species of linen cloth of about the consistency and texture of cotton bagging. The second envelope of these mummies, is a kind of net-work of coarse threads, formed of very small loose meshes,

*Some persons have also found, according to their misconceptions, both giants and pigmies in the mounds and grave yards of the western country. In one instance I ascertained from a medical gentleman on the spot, that the notion of giants, arose from a clergyman measuring the length of a thigh bone found in a mound, by applying the head of that bone to his *perinæum*, and contrasting the lower end with his knees, which, as might be readily believed, fell short three or four inches of the Indian bone.

The pigmies were derived from finding a number of small graves two or three feet in length, containing fragments of evidently adult bones. But it was unknown to the discoverers, that the Indians after disinterring their dead, as we have observed page 115, buried them in graves just large enough to hold the bones made up into a small bundle for the convenience of transportation.

Some of these graves, as those in the vicinity of St Louis, (*Long's Exped. to Rocky Mts.* i. 62,) are lined with flat stones, and are of different sizes, though commonly three or four feet in length. The intelligent traveller we have quoted, justly considered them to have been buried after the flesh had been separated from the bones by a previous inhumation.

in which were fixed the feathers of various kinds of birds, so as to make a perfectly smooth surface lying in one direction. The third and outer envelope, is either like the one first described, or it consists of leather sewed together."

These bodies are found with the knees bent up to the breast, and were no doubt, originally fixed on the bottom of the grave in the usual squatting position of the Indians; and around them were placed various articles, which undeniably are but of ordinary Indian workmanship.

The inattention of writers to those fabrics which our North American Indians formerly manufactured, has induced many persons to consider the wrappers, and other articles found with these dried bodies, to indicate a race of men different from our Indians. I believe, however, that we have sufficiently shewn in page 80, that even the ruder tribes did make such manufactures as we find covering these bodies.

As further proof that our Indians erected these monuments of the western country, nothing has been hitherto discovered on opening the mounds, that indicates any state of civilization materially different from that of ordinary Indian society; and certainly not surpassing the demi-civilization of the Florida nations.

The articles found in the mounds, consist of stone arrow heads, chisels, hatchets, and other stone contrivances that were most probably for ornamental uses. Copper, in the shape of rude beads, tobacco pipes, or small plates, are also occasionally found; and earthenware of various shapes and figures, but of no beauty of form or finished workmanship. Mr Atwater, in the *American Archæologia*, has passed some encomiums on a vessel which is formed by the union of three heads, but which, to judge by the plate, is rude and unsightly enough. I should not have deemed it of sufficient importance to deserve notice, had not that gentleman, and some of my acquaintances imagined a resemblance in it to the figures composing the Hindu triad. Dr. Drake (*Picture of Cincinnati*, 200,) says, the earthen vessels he had seen taken from the mounds, were "unquestionably" of the same species of manufacture, as are now made by some of the Indians of Louisiana; and as to fantastic forms, as late as A. D. 1740, Adair says, (*Hist. Amer. Ind.* 421, 424,) that the Creeks "make earthen pots, pans, jugs, mugs, jars, &c. of various antiquated sorts, which would have puzzled Adam to have given them significant names."

In these *bizarre* vessels of the Creeks, who incorporated into their nation the remnants of the demi-civilized Floridans, I see a much more reasonable source of origin to the earthen vessel mentioned in the *Archæologia*, than in supposing it to indicate a communication with the Hindus.

And to mere fancy I also attribute the idea, that the shells occasionally found in these ancient mounds are similar to the sacred *chanka* of the Hindus. We well know that the American Indians made use of sea shells for drinking cups, and this circumstance naturally explains why they were also buried with the dead, together with other utensils to serve them in the world of spirits.

Dr. Drake (*Picture of Cincinnati*, 206,) describes large marine shells found in a mound, which were cut in such a manner as to serve for domestic purposes.

Bartram (*Travels*, 452) describes the Creeks drinking their infusion of the casine plant, out of large conch shells; and Adair (*Hist. Amer. Ind.* 46,) mentions the same circumstance. That we may not be obliged to go as far as the Indian or Pacific ocean to find such shells, I will observe, that they may be found suitable for this purpose in various parts of the American Atlantic coast. Tonti (*Trans. N. Y. Hist. Soc.* ii. 279,) who

accompanied La Salle to Louisiana, mentions great numbers of shells lying near the mouth of the Mississippi, "of which some were like drinking cups;" evidently by this comparison, alluding to some custom among the Indians with whom he was familiar.

Laudonniere (*Hackluyt, Voy.* iii. 307,) says, "when a king dieth among the Floridans, they bury him very solemnly; and upon his grave they set the cup wherein he was wont to drink." In Pickart's Religious Ceremonies, iii. 132, this cup is called a shell, and is so represented in the engraving illustrating this funeral ceremony.

In a few rare instances, burnt bricks, about four or five inches square, have been discovered, which appear to have been laid as a pavement, whereon human bodies were then burned, and over which a mound was afterwards elevated. As I know of no Indians in North America besides the Mexicans, who made brick, this manufacture would seem to indicate a greater perfection in their social institutions, than we could at first expect from the general character of the Indians; but as they certainly made abundance of burnt pottery, it would shew no great progress in the arts of civilized life, if they also made brick, especially in those situations where stone was procured with difficulty.

Idols made of baked clay, have been also occasionally discovered in these monuments, which are both rude and imperfect in anatomical forms. These figures, like their brick work, though not common, are within the ability of any person who ever moulded a jug or a pot, and judging by the drawings that I have seen, nothing is hazarded in saying, that the profession of brick-maker, potter, and statuary, were united in one artist, whose *chef d'œuvres* in no instance can be supposed superior to those of the Natchez and other Floridans.

Of the various stone articles found in the mounds, we do not think they deserve any particular notice. As far as we can conjecture, they were either for ornamental or domestic purposes, and any excellence they may have over works undeniably Indian, is, that they are frequently highly polished. Those made of calcareous breccia, mentioned by Mr. Atwater, (*Arch. Americ.* i. 227,) are of this description; though it is highly probable, that their beauty depends more on the variegated material employed than in any excellence of workmanship.

Brown (*Western Gazetteer*, 57,) says, a piece of glass was found in a mound in Indiana, "like the bottom of a tumbler, but concave." If it be really glass, I would suppose it indicated that the mound had been raised since the whites have held intercourse with the Indians. But may it not have been a piece of crystalized quartz or obsidian, fashioned into that shape, which persons not mineralogists might very easily mistake for glass?

As to the articles manufactured from copper, there has been nothing found hitherto, of any degree of workmanship superior to that of our Indians, whom in page 85 we have already shewn manufactured that metal into rude ornaments and tools from Nova Scotia to Patagonia.

I have deferred speaking until the present time, of those pieces of silver and iron, that were discovered on opening a mound at Marietta, Ohio, (*Archæolog. Amer.* i. 168, 178,) and which are plausibly enough conjectured to have belonged to a sword and sword belt. But though this may be true in fact, we are not prepared to admit that this iron sword blade and its ornaments which are of plated copper, were manufactured by the race of men who interred the individual covered by this mound. For certainly, if the mechanical arts had attained a perfection capable of producing such articles, we should not find appended to this identical skeleton, small lumps of native copper roughly hammered into the shape of a

plummet, with small pieces of silver stuck in the cracks; as well as nothing else superior to what any rude Indian might have easily made.

As the age of this mound, estimated by the trees that grew on it, is supposed to have been several centuries, it is not to be supposed that this sword was buried much later than the time of Soto, who invaded Florida and marched as far as the Apalachian mountains in A. D. 1540. It may therefore have been derived from that invasion. Or if the interment be supposed to have happened prior to that epoch, it was most probably procured from the Indians on the sea shore, who had received it from some shipwreck before the discovery by Columbus. Either of these suppositions appear to me infinitely more plausible, than to consider it an aboriginal manufacture, when nothing else has been discovered corresponding to such an evident knowledge of the arts of civilized life.

When we consider the comparative perfection to which navigation had attained for centuries before the voyage of Columbus, as well as the more ancient renown of the elder maritime nations, it can scarcely be deemed begging the question to suppose that vessels may have been impelled by storms on the American coasts, and that various articles of European or African manufacture, may in this manner have fallen into the hands of the Indians, which if of an indestructible nature, may be found hereafter from time to time where they have deposited them with their dead. In this manner Roman coins of silver or gold, might have ornamented our Indians in very remote times; and though I consider the stories hitherto made public on this matter, hardly substantiated, yet there is nothing incredible in the relation.

When Amidas and Barlow visited the coast of North Carolina, A. D. 1584, they found the Indians there possessed of some tools, which they had made from pieces of iron procured from the wreck of a vessel, which had been cast on that shore about twenty years preceding their arrival. (*Hackluyt*, iii. 248.)

But there is proof that matters derived from Soto's expedition had reached the western country; for we are informed by the *Archæolog. Amer.* i. 118, that a medal was found near Circleville, Ohio, "which had been given by a Spanish admiral to some person under the command of Soto."

We may also observe, that Soto himself after he had marched some distance into Florida, found in a certain town "a dagger and some coats of mail," which he supposed had been left in the country by Ayllon, who had previous to him attempted the conquest of Florida.

When we consider these facts, and that Soto lost a great many men in his attempt to conquer that country, added to the losses that accompany every military movement, we may easily explain the occasional discovery of swords, helmets, pieces of armor, steel bows belonging to the cross-bow so much used in those times, and other warlike equipments.

From all the facts I have been able to collect upon the history of these antiquities, I am decidedly of opinion, that they were erected by Indian tribes of North America. The more eminent monuments were most probably raised by nations kindred with the Natchez, Taensas, Maubiliens, &c. if not the ancestors of these very people, whose traditions indeed seem to point out some ancient establishments in the western country. The Natchez said, their empire once extended to the Ohio river, which is to a certain degree confirmed by the traditions of the Lenni Lennape or Delaware Indians. These, as we shall presently state, declare that when they dispossessed the ancient occupiers of Tennessee, Kentucky, &c. they fled down to the Mississippi river.

For the more inferior monuments, and especially those east of Pitts-

burg, and through the state of New York, we need not seek a more civilized origin than from the hands of the Wyandots and Iroquois,* or other barbarians who may have intruded themselves on the more ancient possessors of the soil from the west or northwest. This peculiarity has been already observed by Brown in his *Western Gazetteer*, p. 56, when speaking of the different ages of the mounds in Indiana. "The small mounds are from two to four feet above the surface, and the growth of timber upon them small, not being over one hundred years; while the others are from ten to thirty feet high and frequently support trees of the largest diameters. Besides, the bones found in the small ones will bear removal and exposure to the air, while those in the large ones are rarely capable of sustaining their own weight, and are often found in a decomposed or powdered state."

I presume the reason why we no longer see the Indian nations constructing such works as are now found in the western country, arises from several important considerations. In the first place, the introduction of fire arms, enables an enemy to lurk unseen around a village, and to shoot from a great distance any who are unfortunate enough to shew their heads over the rampart. And to nations who warred like our Indians without magazines or stores, their situation would be infinitely better in the field, than to be surrounded in their walled villages, by enemies who could with muskets and rifles fire into the centre of the town from the hills and trees in the vicinity.

Pestilence and famine may also have had an influence in deterring Indians from erecting fortified walls to their towns. The small pox in such situations would rage with hideous fatality, and either destroy the population, or force them to scatter abroad over the country; and the pressure of hunger in case of a siege, would greatly influence any rude people not to shut themselves up in enclosed towns in future wars.

All kinds of Indian manufactures sunk into disuse and neglect when they were contrasted with the superior articles produced by European artists. The tedious preparation of wood, stone, or copper, for domestic purposes, naturally led the Indians to use those of iron, tin, or pewter; and any one could equally well determine the preference to be given to a woollen blanket, or cloth leggings, over their coarse and harsh manufactures of cloth made of rough twine, or from the skins of beasts. The great and increasing demand for furs, by the whites, would tend to keep them continually hunting wild animals for that purpose, and by thus separating the population into families, their tendency to social life and national works would be in a manner destroyed.

As to the time when the more eminent monuments of the western country were abandoned by their erectors, or when the ancient population were overwhelmed by some invasion of the ruder Indians, we can scarcely offer any conjecture. The Indians found in the occupancy of the country by the Anglo-Americans, appear to have lost all remembrance of the time when they first settled in the country, as well as any distinct recollection of the history of the monuments themselves. Within a few years, however, we have been made acquainted through the Rev. Mr. Heckewelder, (*Trans. Hist. and Lit. Comit. Am. Philos. Soc.* i. 29,) with the tradition of the Lenni Lenape or Delaware Indians, concerning their emigration into the states east of the Mississippi, which appears to throw some light on the history of the fortifications of the western coun-

* The truth of this supposition may indeed be considered established, for it is said, (*Archæolog. Amer.* 125,) that articles of European manufacture have been found deposited within these works, together with matters of undoubted Indian fabrication.

try, if we can believe it probable their traditions could be preserved for so long a period of time with the consistency of narration that belongs to Mr. Heckewelder's account. We shall leave this point to the reader's judgment, when we have extracted those parts of the tradition that relate of these matters.

"The Lenhi Lenape, according to their traditions, resided many hundred years ago in a very distant part of the American continent. For some reason which I do not find accounted for, they determined on emigrating to the eastward, and accordingly set out together in a body. After a very long journey, and frequent halts, (even of years at a time,) they at length arrived at the Mississippi river, where they fell in with the Mengwe, (Mingoes, Iroquois or Six Nations,) who had likewise emigrated from a distant country and had struck upon this river somewhat higher up. Their object was the same with the Lenhi Lenape. The spies which had been sent forward for the purpose of reconnoitering, had long before their arrival discovered that the country east of the Mississippi was inhabited by a very powerful nation, who had many large towns built on the great rivers flowing through their land. Those people, as I was told, called themselves Talligeu, Talligewi, or Alligewi. Many wonderful things are told of this famous people. They are said to have been remarkably tall and stout, and there is a tradition, that there were giants among them, or people of a much larger size than the tallest of the Lenape. It is related that they had built to themselves regular fortifications or entrenchments, from whence they would sally out, but were generally repulsed.

"When the Lenape arrived on the banks of the Mississippi, they sent a messenger to the Alligewi, to request permission to settle themselves in their neighbourhood. This was refused them, but they obtained leave to pass through the country and seek a settlement farther to the eastward. They accordingly began to cross the Mississippi, when the Alligewi, seeing that their numbers were so very great and in fact consisted of many thousands, made a furious attack on those who had crossed, threatening them all with destruction if they dared to persist in coming over to their side of the river. Fired with the treachery of these people, and the great loss of men they had sustained, and besides not being prepared for a conflict, the Lenape consulted on what was to be done, &c. At length they made a league with the Mengwe, and both attacked the Alligewi, when great battles ensued in which many warriors fell on both sides. The enemy fortified their large towns, and erected fortifications, especially on large rivers and near lakes, where they were successively attacked and sometimes stormed by the allies. No quarter was given, so that the Alligewi at last finding their destruction was inevitable if they persisted in their obstinacy, abandoned the country to the conquerors and fled down the Mississippi river, from whence they never returned. The war which was carried on with this nation lasted many years," &c.

Excepting the story of the giants, there is nothing improbable in this tradition. It however throws very little light on the subject we have been discussing, unless it may be in the statement, that the Alligewi descended the Mississippi towards Louisiana, where, if we can trust to the correctness of the tradition, we may suppose they either settled themselves, or were united with some of those demi-civilized people we have described under the general appellation of Floridans. This story, therefore, confirms the opinion we have entertained of a connexion between the founders of the monuments of the western country, and the Natchez, Tensas, &c.

But it is not impossible, that some Indian nation or other, excelling the

runder tribes in some particulars of demi-civilization, were living on the Ohio river at times much later than we can suppose the Lenape invasion to have taken place. To justify this belief we adduce the following statements.

The Indians of North Carolina or Virginia informed Amidas and Barlow, (*Hackluyt, Voy.* iii. 258,) that at about twenty days journey overland to the north, was a nation called Mangoacs, who worked metals.

In the year 1663, when Sir Wm. Berkley was governor of Virginia, (*Hist. Virginia, by a native*, 63,) an excursion was made across two ranges of mountains in that state towards the Allegany mountains under the command of a Capt. Batt. But when they had marched thus far, the Indian guides that the English had brought from Jamestown, refused to proceed further, saying, "that they were not far off from a nation of Indians, that made salt and sold it to their neighbours; that they were a powerful people which never suffered any strangers to return that had discovered their towns." From this refusal of the guides to conduct the party, Batt was obliged to return home.

That we may not seem to overlook any thing of importance concerning the ancient population of the western country, I shall, before concluding this chapter, take notice of some traditions of the Indians relating to the supposed constructors of the fortifications, which I was once disposed to estimate of some importance though I now consider them of no consequence. These traditions, which may be seen in the Port Folio for June, 1816, ascribe the erection of the antiquities of Ohio and Kentucky to a race of *whites*, who after maintaining a bloody war with the Indians, were finally exterminated. It may be possible, that their tradition remounts to times in which the ancient possessors of these states were dispossessed by the ruder tribes after a sanguinary warfare. But that they were a race of white men, is unsupported by any thing but their vague and very uncertain traditions, which cannot be deemed of sufficient correctness to establish this point. If there should be any semblance of truth in their story, it most probably alludes to a conflict with some early settlement of French or other Europeans in these countries, which tradition has magnified into a great and important war, in which the Indians, the heroes of the tradition, were conquerors.

That bloody wars have been carried on by the Indians among themselves in the western country, there is no reason to doubt; for a similar state of things has been witnessed in every fertile part of America. Kentucky appears to have been especially distinguished in this particular; for the river, whence the name of the state has been taken, signifies "bloody river;" and the country itself was called by the aborigines "the dark and bloody ground."

APPENDIX III.

OF THE INVASION OF FLORIDA BY FERDINAND DE SOTO, AND OF THE COUNTRIES TRAVERSED IN THAT EXPEDITION.

In the year 1539, Ferdinand de Soto landed at the bay of Spiritu Santo, in East Florida, with an army of about twelve hundred men, to attempt the conquest of that country for the Spanish crown. He was engaged in this expedition about four years, when after having lost the greater part of his troops, he died somewhere on the shores of the Mississippi river, and the remnant of his army abandoning all hopes of conquering the country, built several vessels, and descending that river to its mouth, sailed away to the kingdom of Mexico.

It has been a matter of much curiosity among American antiquarians to ascertain the route of his march, the places he visited, and whereabouts on the Mississippi the brigantines were built that conveyed the remains of his army away from the country.

We have two relations of this military expedition; one by Garcilazo de la Vega, who derived his information from a soldier who served under Soto, and another by a Portuguese writer who belonged to the invading army, and who, as he has concealed his name, is known by the appellation of the Portuguese Gentleman.

The account given by Herrera seems to have been taken from that of Garcilazo.

I have found this inquiry concerning Soto's route attended with many circumstances of difficulty and perplexity, not only from the uncertain orthography of the Indian names, often spelt three or four different ways, and maps also sufficiently inaccurate, but especially from the vague and imperfect manner in which the route of the march is described. Sometimes estimates of the length of the journey are given in day's marches, and at other times in so many leagues, while again it is also evident, that no notice has been taken of other journeys in any manner whatsoever. The direction or course has been partially given for about the first half of their route, but in the latter part no such aid has been afforded to our research.

The plan I have pursued in this investigation, has been chiefly to compare the nature, accidents, and circumstances of their march, with the actual face of the country, which I have studied on two maps, one of which is constructed on the largest scale I could procure, and the second on a scale so reduced that only the leading features of the country could be laid down. This last will be found in general, most conformable to the descriptions of careless soldiers passing through various districts, and thinking of little else than rapine and plunder. Such persons, however, not only confuse many distinct objects together into some general description, but they also often give a magnitude or importance to other particulars that bear no such proportion to the real state of things, and which may in certain instances be detected on a map of large size.

But with all the assistance of books and maps, I have not been able to persuade myself that I have attained to more than a tolerable approximation to the truth, which, perhaps, is as much as can be done on a subject, where the information given is scanty, perplexed, and obscure.

Soto landed his army at the bay of Spiritu Santo, about half way down the peninsula of Florida, on the western side; and from thence he marched his troops in a northerly direction, according to Herrera, one hundred and fifty leagues, to a town called *Anhayca*, in the province of *Palache* or *Apalache*, where they went into winter quarters.

To accomplish this journey, they passed through many swamps, rivers, and forests which they speak of as belonging to several distinct provinces, with capital towns, villages, &c. We have been able to detect only a few of the names by which they have distinguished these towns or provinces as they are pompously termed; such as *Vitachuco*, probably retained in the word *Ivitachia*, *Ossachile*, in *Ausilly*, *Palache*, in *Apalachy*, &c. but as these were certainly insignificant places, they deserve no particular investigation.

The *Apalachy* Indians, at the time the French settled in Louisiana, lived around and above the junction of Flint and *Cattahouchie* rivers, and most probably, had lived there since the time of Soto. The town of *Anhayca*, I have placed north of the river *Uche*, from the following incident in Soto's history. After *Calderona*, who was marching to join him at *Anhayca*, had passed the marsh of *Apalache*, which I cannot make out to be other than the *Ohahiche* swamp, he entered on a large plain, over which he marched about five leagues to a deep stream; (*ruisseau profond*) the *Uche* river, I presume, where they fought a battle with the Indians. Now near this place must have been the town of *Anhayca*, for *Garcilazo*, i. 326, 329, says, that the Spaniards encamped there ought to have heard the noise of the engagement.

We cannot be far wrong in thus locating *Apalache*; for the sea port of *Auté*, which undoubtedly was at the head of the bay of *St. Marks*, was about thirty leagues distant. (*Garcil.* i. 245.)

After leaving *Apalache* in the ensuing spring, they marched northwardly three days to the province of *Atalpaha*; which name is probably, preserved in that of the river *Alapapaha*, the midmost branch of the *Sawanee* river. From hence they marched ten days northwardly along the banks of a river, (I suppose *Flint* river, on its east bank,) until they arrived at the province of *Achalaqui*; (probably a tribe of *Cherokees*, some of which do not pronounce the letter *R*, and call themselves *Chelakees*.) They describe the country here to be poor and barren. If the fertility of the adjoining countries was known to me, it might enable us to state with some plausibility this locality; but being ignorant of these particulars, I can only venture to suggest it may have been in *Houston* county, *Georgia*. From hence they marched to the province of *Cofachi-qui*, which I cannot detect in any name on our maps: but, as they came to a river of such size that they could not ford it, I presume, they had struck on the *Ocmulgee*, to which the nature of the country, and the difficulty of crossing some small rivers that empty into *Flint* river, would insensibly lead them. The principal town in this province they call *Talomeco*, where was a temple which they plundered of pearls to a large amount. I presume this place to have been in *Monroe* county, *Georgia*. Here they crossed the river, (to the east bank of the *Ocmulgee*,) and from hence marched to the province of *Chalache*, (*Cherokees* or *Chelakees* as before remarked,) and in five days more came to *Xualla* or *Chouala*. Here they describe the country as mountainous. I presume they had reached at this time the *Occone* mountains, in *Hall* county, *Georgia*. The *Port. Gent.* p. 70, says, that some of these mountains "were very bad;" but according to *Herrera*, v. 320, "they were not disagreeable, though they were about twenty leagues across, and that they were five days in passing over them."

Hitherto, their course had been northwardly, but from these mountains they turned to the westward, and marched in six or more days to *Guazale*, *Guachoule*, or *Quazule*, for the word is spelt in three ways. It is possible that the town of *Qualatche*, which is situated on the very source of the Catahootche river, designates this station. From hence they proceeded in two days to *Canasaqua*, a name perhaps retained in the river *Connesaugo*, which runs nearly along the 8° of longitude, (west from Washington,) from the mountains, and finally empties into the Coosa river.

At *Canasaqua*, the Indians informed the Spaniards of a province they called *Chisca*, situated to the north, but over mountains impassable to their cavalry. These mountains were certainly the Apalachian.

After leaving *Canasaqua*, in five days they arrived at the town of *Chiaha*, or *Ichiaha*, (perhaps the village of Etowa.) Garcilazo says, they descended from *Guachoule* along the course of some streams, which join at some distance below *Guachoule*, and make so considerable a river, that in the province of *Ichiaha*, only thirty leagues distant, it is broader than the *Guadalquivir* at Seville. (This river I presume, was the Etowa river, which falls into Coosa river.) They crossed this river, and entered the province of *Acoste*; a name I cannot recognise in the maps under my inspection. From *Acoste* they marched into the province of *Cosa*. This province they state to be about one hundred leagues in extent, and that the village of the Cacique, which was also called *Cosa*, was at the other extremity of the province from whence they had entered. It was situated upon the banks of a river. Every part of this description is strictly correct as applied to that town, which is now called in our maps "Old Coosa;" in north latitude about 33° 30', on Coosa river.

Garcilazo (*Exped. of Soto*, ii. 18,) says, that from the time they left *Xualla*, they had tended towards the sea port of *Achusi*, (*Mobile bay*), in the form of a bow.

From *Coosa*, they marched five, six, or seven days to *Talisse*, a town lying upon a very rapid river. (This I consider to have been the *Talisse* of the maps, lying at the elbow of *Talapoosa* river.) They crossed this river, and in six days came to *Tascaluza*; a town we cannot identify on the maps at this place. Bossu (*Travels in Louisiana*, 282,) says, that above sixty leagues above the junction of the *Tombeche* and *Alabama* rivers, and up this last, is a ford called by the *Choctaws*, *Taskaloussas*, which signifies *white mountain or hill*, where we may suppose Soto's army to have crossed. However this may be, they crossed the river that runs by *Talisse*, (*Talapoosa*, but now confounded with the *Alabama* river,) which was more rapid than at *Talisse*, and in about two leagues march they came to *Mauvilla*; which, from their crossing the river, must have been on the north side of the *Alabama* river, and probably east of *Bougchitto* creek. This neighbourhood may be still recognised on the maps, by the village of the "Old Mobilians," or *Mouvillians*, which *Mons. Du Pratz* testifies to be their proper appellation. Old *Mobile*, however, is on the south side of the *Alabama* river, whereas the *Mauvilla* of Soto was on the northern side. It is not very unlikely that the present town of Old *Mobile* is on the site of the village of *Tascaluza*, and that the fortified ruins of *Mauvilla* might yet be found at about six miles N. W. on the other side of the *Alabama*.

Whilst at *Mauvilla*, Soto understood that his fleet under the command of *Maldonado*, were lying at the sea port of *Achusi*, distant, according to the Portuguese Gentleman, seven days journey, or according to *Garcilazo*, thirty leagues. This sea port was also distant coastwise from the port of *Auté*, (*Bay of St. Marks*), about sixty leagues. These distances, which,

however, were only estimates, seem to point out Achusi to have been Mobile bay with sufficient precision.

At Mauvilla, Soto fearing his men would abandon him if he advanced to the sea shore, directed their next march in a northwardly direction, and in five days they came to the town of *Cabusto*, situated on a river of such magnitude that they were obliged to build boats to enable them to cross over. I know of no town whose name resembles Cabusto, but presume it may have been somewhere near the modern town of Erie, on the Black Warrior river, which I suppose was the stream they crossed in boats. After five days of further march, they came to another river, (*Tombigbe*) where they again were obliged to build boats to enable them to pass over. After crossing, we have no account given of the number of days of march, or estimate of leagues to *Chicaza*; where they went into winter quarters and passed the winter season of A. D. 1540.

Chicaza, was undoubtedly in the Chicasaw country, as the very name indicates. I have located it about the 34° of north latitude, and 12° west longitude from Washington. We are justified in assuming this position, from the length of their march in the spring to the Mississippi; for when they left their winter quarters, they marched twelve leagues to Alibamo, a fortified town upon a river, (supposed to be the Yazoo,) and from thence, according to the Portuguese Gentleman, they marched seven days to the Great river, (the Mississippi.) The description given of the Mississippi attests, that it has preserved its present character three hundred years; for the Portuguese Gentleman, p. 112, says, "The river was half a league over, so that a man could not be distinguished from one side to the other; it was very deep, and very rapid, and being always full of trees and timber that were carried down by the force of the stream. The water was very thick and muddy."

After having built boats they crossed the Mississippi, somewhere I presume, about twenty or thirty miles below the mouth of the Arkansaw river. They call the country where they landed, the province of *Aquiro*, a name we cannot recognise in any Indian words preserved on our maps. As far as can be collected from their account, they marched across the province, crossed a river, (the Wachita) and on the fifth day, from a high eminence, (probably near the present southern old Cado village) they discovered the town of *Casquin*,* on the banks of a river (Red river) as great as the Guadalquivir at Cordova. They marched up this river to some little villages where the Cacique held his court, (probably, the northern old Cado villages,) and from hence they proceeded to *Capaha*; in which word we may recognise a town of the Kappas, or Quapaw Indians, who even at this day, have their towns extending across the Wachita from the Red to the Arkansaw river. It is impossible to say where *Capaha* stood, but if a locality be deemed necessary, we may suppose it to have been about the western Cado village, which on Pike's map is near the 18° of lon. west from Washington. The most embarrassing part of their narration, however, is, that they say there was a canal of water of about three leagues in length from *Capaha* to the Great river. As the appellation Great river, has been but just applied to the Mississippi, I was much perplexed to connect other circumstances with the supposition that *Capaha* was within three leagues of that river, and not being able to reconcile the future incidents of their route with such a position, I

* It is not unlikely that by this name, the Kaskaia Indians are intended: but they are now found in the interior of the country. According to Long's Exped. ii. 112, they frequent the country about the sources of the Platte, Arkansaw, and Rio del Norte, and extend their hunting excursions to Red River and the sources of the Brassos.

have presumed that the Spaniards have called the river of Casquin (Red river) the Great river in this instance, either from some mistaken idea of its identity with the Mississippi, or from its being simply a large river, without any reference to the former. If we admit this misnomer to have existed, there remains no other difficulty to overcome; for the ensuing part of their journey agrees with supposing Capaha to have been off Red river.

At Capaha the Indians informed Soto, that at about forty leagues distant* were mountains, (Ozark mountains, or Potato hills) at which he could procure salt; and two Spaniards who were despatched for this purpose, returned after an absence of eleven days with a sufficiency of rock salt, "as clear as crystal," and one load of copper. (*Herrera*, v. 339.)

Afterwards, Soto returned to Casquin, determining to march to the westward, and after crossing the river (Red river) he marched down the stream four or five days, through a fertile country to *Quiguate*, a province and town with the same name, fertile and abundant in provision. I cannot detect this name on the map.† From *Quiguate* they marched in five days to *Colima*, still descending the river, which *Garcilazo* (*Exped. of Soto*, ii. 172,) expressly says, ran by Casquin, and which confirms our supposition that Capaha was on Red river; for such a descent along the river side, will alone suit that stream.

Colima, or *Coligoa*, (for it is spelt both ways,) I cannot identify in any Indian name; but the Port. Gent. says, they marched seven days from *Quiguate* under guidance of an Indian, through a marshy country and so wet that they even slept in the water until they came to *Coligoa*, which lay at the foot of a mountain, and upon a river as large as the *Coya* in *Estremadura*. This description will apply tolerably well to that hill called *Mount Darby*, about 32° north latitude, and by which *Sibly's* river passes.

From *Coligoa*, after five days march they arrived at *Palisema*; but they do not state in what direction they went. As they say, however, the face of the country was rough, we may presume they had left Red river, and marched westwardly across the hills between Red and Sabine rivers, and from thence they advanced to *Tufalicoya*, in the province of *Cayas*; (the *Keyes* Indians?‡) from thence they marched to *Tanico*, (*Tankaways*?§) on a river side, (*Brassos de Dios*) and then in a day and a half more reached *Tula*. From this town they marched in six days to *Vitangue* or *Autiamque*, where they passed the winter of 1541. At this place they say it snowed heavily.

* According to *Herrera* this distance is but four leagues if correctly translated: but in *Garcilazo* it is as stated in our text. That we are correct in following the latter, is justified by the number of days consumed in the journey. They had probably reached the vicinity of the Hot springs of the *Washita*, near which *Maj. Long's* party (*Exped. to Rocky Mountains*, ii. 299,) found native copper. In the same region also is the Saline branch of the *Washita*, near which they probably procured the salt.

† Lest any of my readers might suppose I had overlooked the apparent resemblance of *Coshatta* in this very neighbourhood to *Quiguate*, it may be proper to remark, that the *Coshattas*, are a body of Creek Indians who emigrated to that village about thirty or forty years ago.

‡ The *Keyes* or *Keychies*, live on the E. bank of *Trinity* river at present, but they formerly resided on the head waters of the *Sabine*. (*President's Mess.* 1806, p. 70.)

§ The *Tankaways*, have no particular place of abode, but are always moving, alternately occupying the country watered by the *Trinity*, *Brassos de Dios*, and *Colorado* rivers. (*Pres. Mess.* 1806, p. 74.)

I have not been able to identify any points on their march, or even its general direction after leaving Coligoa, but incline from their future movements to suppose, that they had ascended the river Brassos de Dios some distance up the valley, through which that stream descends from mountains of St. Saba. I think we may be justified in supposing this to have been their route, as the Portuguese Gentleman, (*Exped. of Soto*, p. 139,) says, that in marching from Tula to Autiamque, they were "five days passing over very rough mountains," which can hardly be applied to any other mountains than those of St. Saba.

The Portuguese Gentleman also says, that the river of Cayas, (Red river?) passed by Autiamque, which to make a position, we shall assume to have been situated on Red river, about the 20° of longitude west from Washington.*

While in winter quarters, they made an excursion in quest of slaves into the province of *Naguaten* or *Naguatex*, (Nacodoche Indians?) which they describe as being very populous.

In the spring of the year 1542, they left Autiamque to return to the Great river, (Mississippi,) for Soto became anxious to make an establishment on its banks, by which he could communicate with the sea. To reach that river they made hasty and long marches by a different route from the one by which they had advanced, but of which scarcely any particulars are stated.

The Portuguese Gentleman relates, that after leaving Autiamque, they proceeded to the province of *Ayas*, (Yawyes or Eyeish Indians) where they found a town upon that river, (Red river,) which passes by Cayas and Autiamque. To cross the river they had to build a boat, and after three or four days marching in a very wet country, they came to the town of *Tultelpina*, where there was a river and a lake which discharged itself impetuously into the river.† We have no clue given us, to ascertain whether they had got entangled between some of the numerous lakes that discharge themselves into Red river, or whether it may not have been some lake on the Wachita river. But they crossed the lake with considerable difficulty on rafts and floats, and then marched in three days time to *Tianto*, a frontier town of the the province of *Nilco* or *Anilco*. Herrera, vi. 5, says, from hence they marched thirty leagues through that province to the chief village of the Cacique, which stood upon the bank of a river as large as that of Seville. They crossed this river, and marching through a woody desert came into the province of *Guachcoya*, and then to the capital thereof, seated on the hillocks by the side of the Great river.

Of the places last mentioned, Tianto and the river of Nilco, we can find nothing synonymous in the Indian names as laid down on our maps; but taking every thing into consideration, both as respects the past events of their journey, and those that presently are to be related, I presume, the river of Nilco was the Arkansaw. The Portuguese Gentleman indeed says that it was the same river that ran by Cayas and Autiamque, which we have hitherto considered to have been Red river, and with

* Autiamque, or Vitangue, it is not unlikely, is a corruption of the Yancton Sioux word O-tong-y-a, which signifies a village.

† This is precisely the character of the numerous lakes along the course of Red river. In the documents accompanying the President's message for 1806, it is said, "When that river is rising, the bayaus that connect with the lakes run into the lakes like a mill-tail, till the lakes are filled, and when the river is falling, it is the same only the contrary way." It is also said, page 97, that similar lakes are found all along Red river for five or six hundred miles: which will bring them within the limits of Soto's crossing place, according to our conjecture.

which Nilco would agree as well as with the Arkansaw, was not the supposition opposed by the length of their voyage down the Mississippi to the ocean. Now, as I think, it will be impossible to reconcile their voyage down that river, with a position near the mouth of Red river, it will follow conclusively, that they debarked above the Arkansaw, for it is impossible that any other river can divide the question of locality with the two we have mentioned.

Garcilazo, (*Exped. of Soto*, ii. 221,) says, that Guachoya was situated seven leagues from the mouth of Nilco river. That it was above, or north of this river, is evident from Herrera, vi. 7, who describes the canoes of a military expedition to have "went down" the Great river, (Mississippi,) and up Nilco river to the town of that name, a distance in all of about twenty leagues.

At Guachoya, Soto the commander of these villanous banditti died, and his body was sunk in the Mississippi, where they say the water was nineteen fathoms deep, if Herrera's Spanish measures be translated correctly, which I very much doubt.*

After Soto's death, his followers made a fruitless attempt to march to Mexico by land. They assert, they went about one hundred and fifty leagues to the westward, and got in sight of vast mountains, but from the desert state of the country, and its unpromising appearance, they again returned to the Great river. Here they commenced building their brigantines, in the province of Aminoya or Minoya, which they state, was about seventeen leagues above Guachoya.

We have no means whereby we can ascertain how far west they marched on this expedition. The mountains they mention may have been some of the spurs of the Rocky mountains, though we can hardly think they had reached that chain. Minoya, or Aminoya, I have been unable to detect in any Indian name in this part of America. There was an Indian nation called Tamaoas, a little above where we have located Aminoya, and it is not impossible the Spaniards may have corrupted that appellation.† At any rate, Aminoya was, according to Herrera, seventeen leagues above Guachoya. The Port. Gent. says, they were two days march distant. That a plausible locality may be assigned for this place, we have ventured to select the neighbourhood of the town of Helena, about thirty-five miles above the mouth of the Arkansas river.

At Aminoya, they built seven brigantines; and having embarked, they descended the Mississippi to the ocean.

The only method by which we can plausibly determine, whether Aminoya was near the mouth of the Arkansas, or Red river, will be to ascertain, as near as possible, the number of days they were actually employed in descending the Mississippi. For as we know the velocity of the current, we may ascertain with tolerable exactness, the number of miles per day they would be carried down by the mere force of the stream, and thus learn the minimum distance they would descend in any certain number of days. We should then, if it be possible, add to the simple force of the stream, an additional velocity from the use of oars and sails; but for this we can have no data though we must bear the fact in mind.

*I presume, the Spanish word used by Herrera is *vara*, which is but thirty-three inches of our measure.

† The Tamaoas, who were of the Illinois stock, lived in the time of the Chevalier Tonti, (A. D. 1679,) about one hundred and forty years after Soto, on the Mississippi; about ten leagues below the mouth of the Missouri river. This will place them pretty close to where we have supposed Aminoya to have been. (*Tonti in Trans. N. Y. Hist. Soc.* ii. 264.)

The Portuguese Gentleman says, the voyage lasted seventeen days, and he estimates its length to have been about two hundred and fifty leagues.

Garcilazo relates, the voyage continued during nineteen days and twenty nights, and that they sailed during that time about five hundred leagues.

As the number of leagues stated in either relation, was avowedly guess work, no reliance need be given them, and the difference in the number of days may be explained, by considering the Portuguese not to have counted the three days that they stopped to refresh themselves a little above the mouth of the Mississippi before they went to sea, while Garcilazo counts the time to the very ocean. We shall, however, take the account of the Portuguese Gentleman, and after ascertaining as carefully as we can, all the various delays and stoppages that occurred during the voyage, then make a fair estimate of the time during which they actually made progress.

They left Aminoya, 2d July, A. D, 1543, but according to the new style to which this time must be reduced, on the 14th July; and descended as far as Guachoya, where they stopped several hours but did not land; suppose the detention was

Hours 6

The next day they landed at a wood, but at night they went aboard their vessels; probable stoppage

12

They once more landed at a town, where a party of horse were put on shore who plundered a village; say

24

They moreover tarried here a day to embark their plunder; After this they embarked and fell down the stream to a town on the river side, where they landed and burnt the village.

Their whole force, (about 300 men,) appear to have been landed and drawn up in battle array; we suppose the detention was

24

The next detention appears to have been from a battle on the river with the Indians, during which time they were either at anchor or made very little progress; say

6

They now speak of frequent detentions they had experienced on account of the boats that carried their horses, and to avoid this delay for the future they landed and killed them, intending to dry their flesh for provisions, but the Indians making a formidable attack at this time, the Spaniards fled to the brigantines. We suppose the whole of the detentions they complain of, as well as this particular landing, may be

48

After this time, no other circumstances are related whereby we could estimate any other detention.

According to our estimate, they were delayed on their voyage five days and a half; which, however, we think may be safely called six entire days; which deducted from seventeen, leaves eleven days for the actual voyage.

The current of the Mississippi at this time of the year, (July,) may be stated at about three miles per hour.

Having thus settled our data, we now proceed to observe, that if Aminoya, had been at the mouth of Red river, their voyage thence to the ocean, would have been about three hundred and fifty miles, which for eleven days progress will average but about thirty two miles per day, or about one and a quarter miles per hour under the united impetus of sails, oars, and the steady current of the Mississippi. As we have every reason to think a log would be floated down with twice the velocity, it seems to follow conclusively, that Aminoya could not have been at the mouth of Red river.

The Arkansaw falls into the Mississippi, about seven hundred and twenty miles above its mouth, which will allow them to have descended the stream at the rate of sixty-five miles a day, or about two and three

quarter miles per hour during the twenty-four hours; which is about a fair allowance, as they did not continue under way during the whole night except at particular times.

They also used their oars on certain occasions with all the strength they could apply to them; and their sails, when the wind served; but we know not how to estimate the additional velocity thus acquired. It probably, during the voyage, would not compensate for the time they lost, by stopping for five or six hours during the nights they were on the river, when not pursued by the Indians in their canoes.

But if it be still thought that they ought to have descended the Mississippi at a greater rate than sixty-five miles per day, we can only support our conjecture by this supposition that they either stopped, or were detained a longer time than we have allowed, or that they have omitted other delays in the descriptions they have given us. But *cæteris paribus*, the difficulty will be two fold, to reconcile their voyage to have been from Red river; and this being negatively established, it will follow, that Aminoya must have been just above the Arkansaw; for I think it impossible that any other river can be brought within the bounds of their expedition on the land.*

* Since writing the above, I feel satisfied, from the following authority, that their actual progress down the Mississippi according to our estimate, confirms the position of Aminoya to have been above the Arkansaw.

"The general current of the Mississippi (*Stoddard, Sketches of Louisiana*, 371,) is from $3\frac{1}{2}$ to 4 miles an hour. In low water, a boat will float down at the rate of from 45 to 50 miles in twenty-four hours. In high water, from 90 to 100, and at a mean height, from 60 to 70 miles. Between the Arkansaw and the Delta, the velocity of the current is 1-3 less, and from the Delta to the outlet by nearly one half."

THE END.

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